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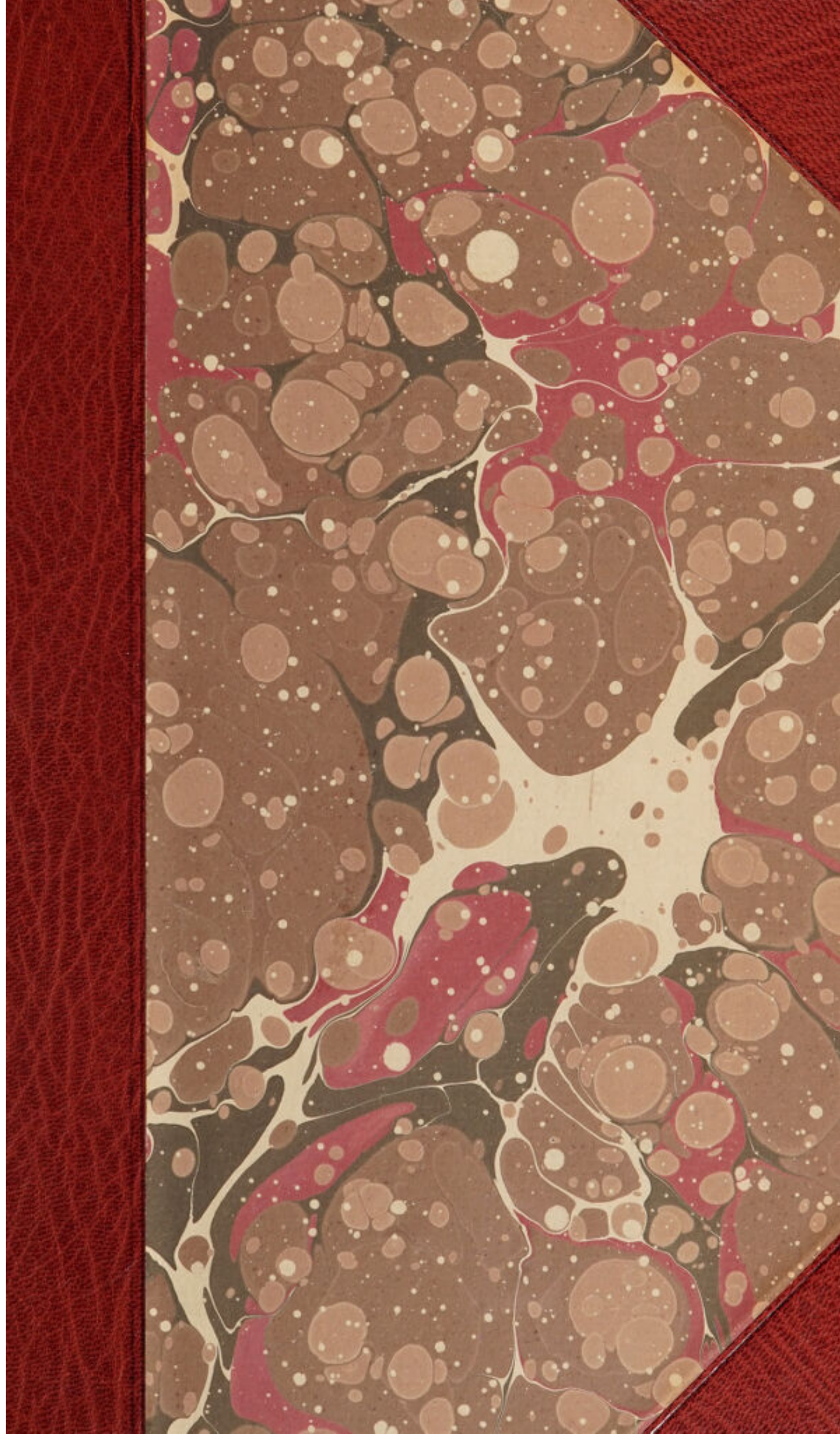
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SKETCHES
OF THE
MEDICAL TOPOGRAPHY
AND
NATIVE DISEASES
OF THE
GULF OF GUINEA
WESTERN AFRICA.

BY
WILLIAM F. DANIELL, M.D.

Assistant Surgeon to the Forces, &c.

LONDON:
SAMUEL HIGHLEY, 32, FLEET STREET.

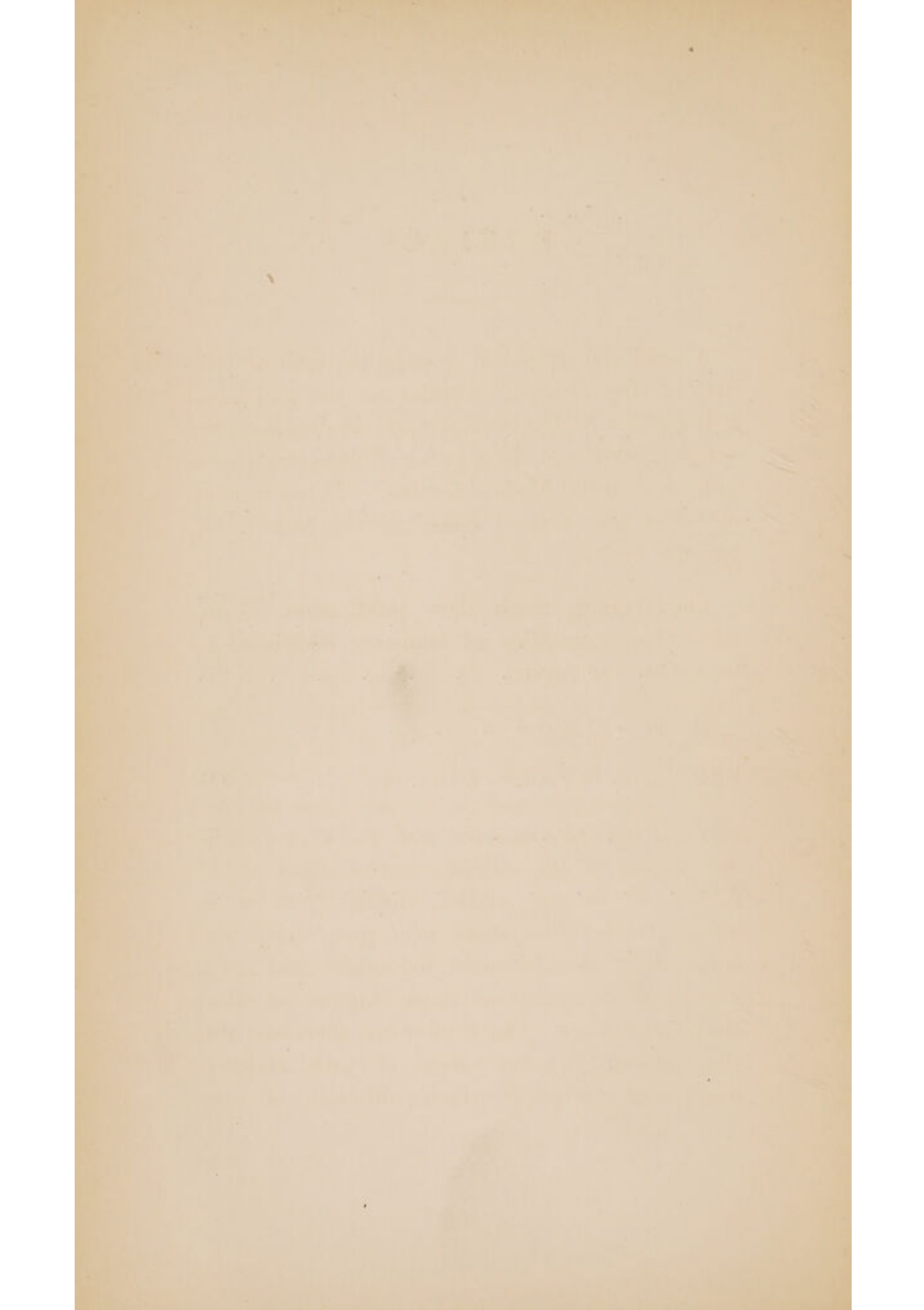
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PREFACE.

A brief topographical description, with an outline of the diseases peculiar to the aboriginal tribes of the Bights of Benin and Biafra, appeared several years ago, in a series of detached papers published in the *Medical Gazette*. These communications, now revised, constitute the basis of the present work.

The Author, since their publication, having enjoyed opportunities of acquiring additional information on various topics connected with the subject, has been induced to avail himself of these researches, by embodying them in the succeeding pages, with the results of his previous experience.

The present volume is not intended to enter into any details connected with the modes of life or customs of the different native tribes of this portion of Western Africa, further than is requisite to develope those principles which tend towards the elucidation of the origin, and native system of treatment of those diseases to which they are incident. In conformity, therefore, with these objects, a great variety of crude materials have been excluded, which, although of some

interest and importance in a philosophical point of view, nevertheless could not be consistently incorporated with these introductory sketches, without creating some confusion.

In conclusion, the Author will feel sufficiently rewarded should this work be the means of eliciting further enquiries into subjects which at present are involved in much obscurity, or prove of utility to those who are obliged to visit the Bights; and he sincerely trusts that they who may be influenced by the laudable desire of investigation, will escape the difficulties and perils which so frequently obstruct the path of those who become travellers in these unhealthy regions.

London, Sept., 1849.

MEDICAL TOPOGRAPHY
AND
NATIVE DISEASES
OF THE
GULF OF GUINEA.

INTRODUCTION.

Χωρέων δὲ θέσιν καὶ φύσιν ἐκάστων ὠδεύρη διαγινώσκειν.

ἸΗΠΙΟΚ. περὶ Διαιτήσεως, 6.

WHEN we refer to the annals of history, we find that the Portuguese and Spaniards were, from a very early period, familiarly acquainted with the greater portion of the western coast of Africa. They appear to have been uniformly actuated by the narrow-minded policy of the adventurers of that age, and indeed of much later ages; they neglected no precaution whereby they might secure to themselves the rich field of commerce, which was there displayed to their admiring gaze, and used every means to exclude other nations from partaking in its varied resources. A few years, however, must have demonstrated the fallacy of these expectations, for we find in the year 1553, records of an Englishman, of the name of Wyndham, trading in the Rio Formosa for pepper, and

other indigenous productions, in conjunction with a vessel belonging to the Portuguese. From this period, British influence may be said to have gradually extended itself over the Babel of petty kingdoms that stud the shores of Western Africa, from the Gambia to the equator, and from thence to the Cape of Good Hope ; the supremacy, trade, and prospects of earlier discoverers, waning rapidly under the influence of successful rivalry.

A glance at the mercantile relations of Great Britain with this portion of Africa, will shew how extensive and important the connexion has become, especially since the commencement of the present century. Were it not for the fatal insalubrity of climate, so deleterious to the European constitution, where life is not forfeited at once, it is impossible to say what extent our commercial intercourse would have acquired with the inland regions of the vast continent of Africa, which lie at this moment unexplored and unknown. The rivers which empty themselves in the Bights of Benin and Biafra nevertheless receive from sixty to seventy vessels of considerable burden annually, which employ several hundred seamen, and, carrying out freights of the manufactures of this country, return with cargoes of palm oil, ivory, dye-woods, and other articles of price.

Although this portion of the coast of Africa is so much frequented, and so large a quantity of its produce is transmitted year after year to English ports, it is surprising how little informa-

tion we have relative to its topography, seasons, capabilities, natural productions, inhabitants, &c. This, however, may in some measure be owing to the individuals who visit that country being rarely possessed of the kind of education which he who travels into new and little known regions ought to have, and partly also because it is not always held prudent among trading communities to promulgate information which might possibly conjure up a host of competitors. And then it is certain that in many instances those who were most competent to give information upon the countries of Central Africa have been the victims of its unhealthy climate.

It is much to be regretted that the causes of the insalubrity of Western Africa, and the pathology of its maladies, should be so imperfectly understood at the present time, since the preservation of life ought surely, above all other interests, to have been made the subject of deep consideration.

During my residence in several of the rivers which form what is termed the delta of the Niger, and when anxiously engaged in my professional duties, I have often painfully felt the necessity of a work of reference which might throw some light on the disorders that were endemical in those districts, but I must confess that I have found nothing to aid my investigations on this important subject. This hiatus I have now essayed to fill up by the few succeeding hasty and, I fear, imperfect sketches. I am fully aware of the deficiencies that must

almost necessarily be apparent in them, but I trust that the motives which have led me to come before the profession will plead in some degree for all imperfections of style that may appear, and that the facts and observations I have to offer may contribute to the benefit of those who are obliged to visit the coast of Africa. I shall also enter at some length into the host of pestilential diseases which there prevail, and which prove at periods far beyond the control and best efforts of human skill. Had it not been for the confidence inspired by a practice successful in the great majority of cases, my inclinations would have prompted me to let the subject fall into other hands more competent to discharge what I believe to be an imperative duty.

In referring to the publications which have appeared during my absence from England, I accidentally met with a series of papers on the fevers of the Gambia and Sierra Leone ; since my return I have also perused the work of Mr. Boyle, which I had not done previously. The papers on fever by Dr. Burton, communicated in the *Provincial Medical Journal* for 1842, certainly afford the most correct and comprehensive delineation of the affections endemical to our African colonies ; and many of his views are in perfect accordance with my own, while others are greatly at variance. Of course, considerable allowance must be made for differences of situation, geological distinctions, and the circumstances under which he has studied

African fever. Circumstances always essentially modify the characters of tropical diseases. It may be also necessary to state, that although a remarkable coincidence frequently occurs in the mode of treatment between Dr. Burton and myself, yet I was thoroughly convinced, from practical experience several years before the appearance of his sentiments, that the means I had adopted were the most efficacious that could be used. More recently, and since the preceding passages were written, the Medical Reports of the Niger Expedition, by Drs. M'William and Pritchett, have been published.

Although the diseases which prevail on the west coast of Africa may be considered as but few in number when placed in contrast with the more varied and comprehensive series of European maladies, yet they are not the less entitled to our attentive consideration: in point of interest there is, perhaps, no class of morbid affections to which the human frame is liable which demands greater attention, or requires a more studious investigation, than those of which I am about to treat. At present, little progress has been made in the ample field of pathological science presented by the African continent; it is only recently that the few works which profess to allude to the subject have appeared, and they, like all rudimental treatises, afford but very partial general summaries, the principal object proposed being usually little more than a meagre description of those diseases which are prevalent in our colonial settlements in the

higher latitudes of this continent; the lower, or equatorial division of the coast, being left entirely uninvestigated.

Experience has already demonstrated the fact, that of all those tropical countries visited by Europeans, Africa is that which is most deadly. The humidity of its atmosphere, and the high range of temperature, conjoined apparently with exhalations due to the decomposition of vegetable matter, conspire to render it singularly inimical to European constitutions, and to make it the theatre of a class of diseases differing from any that have been observed in other quarters of the globe.

Notwithstanding the vaunted assertion, that man, especially the inhabitants of the northern and temperate zones, possesses in a greater degree than any other race a power of adapting his constitution to the most various climatorial influences, the unprecedented sacrifice of European life in several of our African colonies would lead us to suspect that this statement has been made on very fallacious grounds. If we contemplate the present condition of these settlements, we shall discover how slightly the lapse of time and labour have diminished the number of victims; how little has been done to abate the causes which create these deplorable results: the ominous title of the "white man's grave" has been but too correctly applied to the countries situated within the tropics in Africa. This apparent inability to resist the peculiarities of the African clime can only be attributed to the

operation of certain influences belonging to it, and from the agency of which originate those inordinate derangements of the system that are so familiarly witnessed there. Peculiarity of organization alone does not prevent the prejudicial action of these influences; that there are other and equally efficient, but inexplicable states of the constitution that assist to establish this process, there can be little doubt, since if such had not been the case, the dark races would in general enjoy that immunity from febrile diseases which it is so desirable an object to attain. The natives of the East, and the negroes of the West Indies, with those of the northern and southern States of America, are all subject to the same causes which affect the white individual; nay, even the native African, provided he has resided for any length of time beyond their influence, is not exempt upon his return from their morbid effects. What the nature of the causes or elements is which produce the various abnormal states in the human frame, which we designate under particular names, and what peculiarity of constitution or temperament best fits a man to withstand disease-exciting influences, are comparatively unknown to us.

That portion of the west coast of Africa in which the British settlements are situated, forms but a very insignificant district in the vast unknown regions of a continent which possessed, from the earliest records of antiquity, empires whose fame and magnificence historical tradition has

transmitted to us through an uninterrupted succession of ages. These colonial establishments are of modern date, all being founded subsequently to the fifteenth century, in those divisions of tropical Africa comprehended under the appellations of the Windward and Gold Coasts. The main feature in the selection of the sites has been in all probability their prospective commercial advantages; their salubrity being estimated as only of secondary importance. If such has been the case, and circumstances appear to support it, their rise, progress, and history, will furnish us with the most instructive example as to the fallacy of all mercenary speculations, whose ground-work has been an apathetic indifference to the waste of human life. From the commencement, these possessions have proved pestilentially destructive to their white populations, and what from periodical epidemics, and other local affections severely afflicting them, heightened from the influence of fear, with exaggerated embellishments, they have acquired a gloomy character, by no means commensurate to the real state of affairs. By degrees an erroneous supposition has led many into the absurd belief that a residence in these countries is almost equivalent to a premature death, and has readily induced the more timid to suspect that they were merely the representations of so many charnel-houses on a larger scale for all who might have the temerity to reside in them. However merited the application of such titles may be, I question

whether there are not other localities equally resorted to by European traders, but not included among our colonial settlements, to which this notoriety may be more reasonably ascribed: I allude to the embouchures of the rivers in the Bights of Benin and Biafra.

Sierra Leone, the principal seat of the British government in Western Africa, is tolerably well known to most individuals who have frequented this portion of the globe. Although in point of local eligibility and construction it is far superior to most of the colonial establishments on the coast, yet a protracted residence in it is always attended by more or less ill health. To the careless and superficial observer, this settlement in the distance appears to be anything but prejudicial to human life: the blue mountain summits, clothed by the varied tints of an ever blooming verdure, and diversified at intervals by groups of dusky villages and native habitations, that heighten in effect the manifold attractions of its luxuriant scenery, excite the most pleasing emotions; distrust, apprehension, with a mingled train of depressing thoughts, engendered by its melancholy history, rapidly fade and vanish before the increasing admiration produced by the contemplation of its charming *coup d'œil*.

The settlements of the Gambia are not so favorably situated as the above, being deficient not only in picturesque embellishments and local advantages, but also in affording a less healthy climate.

Vast alluvial and densely wooded mangrove morasses extend on all sides, the heavy and monotonous scenery of which reminds the voyager of the more deadly swamps of equatorial Africa.

The Gold Coast, although in lower latitude, presents a corresponding similarity to the regions in the vicinity of Sierra Leone, with a series of verdant uplands which render it equally alluring. Picturesque views of a fertile country successively gleam forth and afford to the European a gayer transition from the dull and unvarying tameness of the preceding Kroo-shores. Forts of different nations, erected on the most commanding clearances of the wooded acclivities, for the purposes of protection and commercial intercourse, are scattered here and there, with petty towns, villages, and ruinous fortalices, that gratify the eye over the hazy vista of ocean.

It would not come within the scope of the present volume to enter into any further details of a subject so comprehensive as the description of the Windward and Gold Coasts: if such had been necessary, it would have been merely to exhibit a faint outline of their characteristic features, in order to point out those geological formations so widely at variance with that tract of coast which will shortly claim our notice. It must be evident to those who are in any degree conversant with the nature, endemic influences, and other local peculiarities, of the British colonies in tropical Africa, that they enjoy many advantages which render

them far more salubrious than the marshy mangrove forests of the Delta. Land more or less elevated above the level of the ocean, of a silicious gravelly soil, calculated for the percolation of moisture, and partially divested of its luxuriant vegetation, will be manifestly more congenial to unacclimatized constitutions, than the alluvial swamps of the Bights which are continually inundated by the influx of the tides. From these extensive surfaces of mud and stagnant water, exposed to the action of a torrid sun, are generated those miasmatic exhalations which militate so much against the preservation of health.

Such are the comparative topographical differences in the colonial and other regions of Western Africa, and from a knowledge of which medical authorities have decided that the Sierra Leone and Gambia settlements rank as the most healthy, the Windward and Gold Coasts next; and, lastly, those mercantile stations in the Bights of Benin and Biafra.*

From a careful investigation into the value of this artificial arrangement, I am inclined to imagine

* According to the statement of Mr. Ferguson, the late Staff-surgeon at Sierra Leone, the proportion of deaths to the cases of bilious remittent fever among the troops quartered in the northern African colonies, in the year 1825, were, in the

Gambia	as 1 to 1·57
Sierra Leone	„ 2·73
Isles de Los	„ 7·00

The Statistical Report also of Major Tulloch, in reference to the mortality of 1825-6, perhaps more perspicuously indicates the relative

its construction has been based on the two first divisions, deriving their insalubrity more from epidemic visitations, and not so much from other sources as has been too commonly reported. This will partly account for the fearful mortality which has at some seasons nearly depopulated these places of their white inhabitants, whilst at others they have been remarkably healthy. The greatest sacrifice of life which has hitherto prevailed in the Gambia and Sierra Leone has unquestionably emanated less from endemic causes than any other. This may be easily proved, from the mortality being notably trifling during the intervals of these periodical epidemics, and by the predominant affections not being accompanied by that adynamic

loss of life in each of these colonial governments, and their subordinate dependencies. Of the force employed in them, the deaths per thousand amounted in the

Isles de Los	500
Sierra Leone	650
Gambia	1500

Moreover, in the same publication it is stated, that out of 1658 white troops sent out to these possessions (including that of Cape Coast) from 1822 to 1830, 1298 perished from climateric causes, while the remainder, 387, were invalided, and otherwise accounted for. Now, out of these 387 men, 17 died on their passage home, 157 were described as incapable of further service, and 180 as qualified for garrison duty; thus leaving 33 men only who were reported as fit for further service. There are, however, sufficient grounds for belief, that at that period the civilians suffered less from epidemics than the military garrisons, owing to the adoption of customs more in unison with the nature of the climate, or from other means fully as efficacious. During the prevalence of the more recent epidemics the reverse has been the case, owing to the withdrawal of the white troops which formerly composed the garrison, and the substitution in their place of detachments from the black West India regiments.

type, as was the case when the bilious and yellow remittent fevers occurred in the years 1823, 1829, and 1837.

Could those causes of disease which have been hitherto ascribed to climatorial alternations be more thoroughly investigated, I apprehend we should discover that no small number were founded on very inconclusive data. It is a well-known fact that the notorious insalubrity of Africa has frequently served as the scape-goat on which the blame of those evil consequences (resulting from the reprehensible indulgence of dissipated courses) might be unreservedly thrown, without the risk of their being disputed or even questioned. When we seriously reflect on the impaired constitutions of two-thirds of the human beings who frequent these colonies, recklessly indifferent as to the price of life, we require no further argument for the rational explanation of those abnormal states of the system that so largely swell the amount of victims in these occasional and almost inexplicable pestilences. As this, however, is a topic of great importance, it will be necessary to revert to it more at length in a future series of communications.

I shall now commence the description of those regions situated within that division of Western Africa comprehended under the title of the Bight of Benin; regions by far the most deleterious to the unseasoned European throughout the African continent.

PART I.

THE BIGHT OF BENIN.

CAPE ST. PAOLO, or St. Paul's, is the western extremity of the Bight of Benin, and the commencement of the Slave Coast.* It is situated in $5^{\circ} 45' \text{ N. Lat.}$, and $1^{\circ} 52' 18'' \text{ E. Long.}$ With the exception of some insignificant elevations in the neighbourhood of Gugligou, Pulley, Whydah, Porto Novo, and Badagry, the characteristic features of the shores are their excessive lowness. They preserve here the same dull and unvarying outline of one vast alluvial and densely wooded forest, extending over an area of at least one hundred thousand square miles, partially irrigated by the Atlantic tides, and intersected by numerous rivers and creeks, whose muddy banks are unceasingly overflowed. At the distance of several miles from the coast, the peculiar odour arising from swampy exhalations, and the decomposition of vegetable matter, is very perceptible, and some-

* A couplet, from an old doggrel rhyme, supposed to date its origin from the period when the English traders were zealously engaged in the slave trade, thus ominously cautions the unseasoned stranger:—

“Beware and take care of the Bight of Benin,
For if one comes out, twenty stay in.”

times even offensive. The water also is frequently of a dirty hue, with leaves, branches, and other vegetable debris floating on the surface, brought down from the interior by innumerable narrow channels, that empty their turbid streams into the open ocean. The beautiful and undulating scenery of the Gold Coast may be said to terminate at the Rio Volta, eighteen miles beyond Cape St. Paul's, and is succeeded by the unattractive alteration just noticed. In approaching the land from the westward, the soundings throughout the Bight, which are from four to six miles from the beach, gradually shoal from ten to seven fathoms. In the eighteenth century, the settlements on this coast were deemed of the highest value, and were perhaps founded at an earlier period than most others in West Africa, on account of their eligible position and other convenient facilities for the procurement of slave cargoes. This inhuman traffic still flourishes in many of the ports, although of late it has been much decreased, being partly suppressed by the vigilance of our men-of-war.

The first commercial establishment in these regions is the dilapidated fort of Quitta, formerly belonging to the Danish government, but now abandoned. It has a commanding appearance, with an exterior of dazzling whiteness, as if recently whitewashed, and is surrounded by a quantity of low brushwood, partly cleared away in front. This fortress is included within the limits of the kingdom of Kerrapay, and lies about thirteen

miles to the eastward of St. Paul's, being erected on a strip of ground between the sea and a salt lake inland, which communicates with the Cradoo Lake by means of a small river (West Lagos), running parallel with the coast. It is now but seldom frequented, other towns located to leeward possessing superior claims to the attention of the trader, with a more enlarged field for speculation. Acquijah and Paurey are two villages distant nine and sixteen miles to the north-east of this settlement. This portion of the land was generally termed the Coto Coast by the earlier voyagers. Forty miles from Quitta is the town of Little Popo, founded close to the water's edge, and where the Dutch had originally a colony. The landing is very difficult of attainment, especially in the rainy season, owing to the tremendous surf. From these untoward circumstances its position is necessarily damp and unhealthy.

Although the slaves which were formerly collected in such immense numbers for shipment at these ports, usually passed under the denomination of Popoes, but few were procured from the coastal districts in their immediate neighbourhood, the greater portion being purchased either in the kingdom or town of Jenné, or from another extensive country adjoining it, named Adj-jah, the inhabitants of which are distinguished from the surrounding people by two small incisions, resembling a cross, over the malar bone of each cheek. In corporeal mould, the Adj-jah population appear

well formed, the hue of their skin varying from a moderate dark to a blackish brown; they are endowed with a regular and somewhat intelligent cast of features, which evince a certain amount of intellectuality. Under these favourable aspects they assume a more exalted position in the scale of negro humanity, both as regards their moral and physical characteristics, particularly when placed in apposition with other tribes of Ebo origin located in the regions more to the southward of them.

The intervening shore between these places is singularly tame and flat, and presents only a few scattered villages that occasionally peep forth from amid a profusion of sombre foliage. In the vicinity of Gugligou, the last of them, four slight elevations of the country adjoin the strand, and are the only local attractions that enliven the dreary waste of wood and water for a long succession of leagues. Twenty-four miles to the eastward of Little Popo is Great Popo, preceded by a very low and marshy country, scarcely above the level of the ocean.

This town a few years since was also a great emporium for the sale of slaves, from which some thousands were annually exported, chiefly obtained from Dahomey and the adjacent kingdoms. It is situated near the entrance of a small river, that flows from the lake above mentioned, and is unnavigable by vessels of even a moderate tonnage, in consequence of the accumulation of mud and sand

that forms an impassable bar. The Portuguese, English, and Dutch, formerly possessed factories here. The natives are a mild, industrious, and quiet people, mostly engaged in trade and agriculture. These towns are not unfrequently confounded one with the other, under the vague term of Popo. Popo river was called Rio do Poupou, or Tary, and the insular patch of ground on which the town is founded, from its moist and alluvial condition received the appellation of *terra anegada*. A similar description will apply to the land from this port to Griwhe, a space of sixteen miles, a slight elevation a short distance from the latter alone interrupting its regularity.

Griwhe, Whydah, or Ouidah, also known to the French and Dutch traders under the name of Juidah and Fida, is in $6^{\circ} 19'$ N. Lat., and $2^{\circ} 5'$ E. Long., and is at present the principal sea-port town of Dahomey to which European traders resort, being the main outlet to the fertile and productive district of the same name. The appearance of the country in the vicinity of the town resembles the American prairies or savannahs, and like them is low, flat, with occasional knolly elevations. The soil, dark and loamy, is clothed with lank grass and wooded islets, which are well stocked with deer and game. Its climate has been supposed to be more congenial to the constitutions of *inacclimatés* than most of the localities in this Bight; but it is, in point of salubrity, incomparably inferior to our possessions on the Gold Coast. Dr. Lind,

however, states that "the air in Whydah is bad;" but he also remarks that to leeward it is "much worse, nay, in a manner pestilential to Europeans in the Gulph of Benin, even as far as Cape Lopez."* Prior to 1727 it was an independent state, in which year it was invaded and overcome by the warlike sovereign of Dahomey, Guadjá Trudo. Since then it has, in conjunction with Ardrah, become annexed to the extensive provinces of that spacious empire. The succulent and sweet-flavoured tropical fruits may be procured in all these towns in greater or less abundance, but more particularly in their surrounding territories. Pine-apples, oranges, guavas, limes, melons, bananas, &c., grow in wanton exuberance in the environs of Whydah, and would tempt the palate of the most fastidious by their exquisite fragrance. Among the plants also indigenous to Whydah may be mentioned the *Saccharum Officinale*,¹ *Guilandina Bonduc*,² *Capsicum frutescens*,³ *Parinarium excelsum*,⁴ *Lycopersicum solanum*,⁵ *Panicum miliaceum*,⁶ *Nasturtium officinale*,⁷ *Amomum Grana Paradisi*,⁸ *Ocymum basilicum*,⁹ with various other productions belonging to the *Solaneæ*, *Cucurbitaceæ*, *Palmæ*, &c. There are several species of the *Indigoferæ*,

* *Essay on Diseases Incidental to Europeans in Hot Climates*, p. 58.

¹ Sugar cane. ² Nicker tree. ³ Guinea pepper. ⁴ African plum. ⁵ Love apple. ⁶ Millet. ⁷ Water cress. ⁸ Mallagetta pepper, or grains of Paradise. ⁹ Common basil, a plant almost naturalized in every country of Western Africa. By the Arabs it is termed رِبْن (Ribhan), and by the inhabitants of Egypt رِبْحَان (Ribhan.)

employed by the natives, not only for their medicinal properties, but also for the purposes of dyeing. Those commonly administered by the native practitioners for the cure of diseases are the *Indigofera tinctoria*, *I. hirsuta*, *I. enneaphylla*, &c.; but it is often difficult to determine the correct species from the various mutilated specimens that are submitted for examination. The Ebo term used by some of the tribes to designate the *I. enneaphylla*, or trailing indigo, plentifully found in the interior is *Né*, probably a corruption of the Arabic term نيل (or نيلة): it is administered in enteritic affections and as a vermifuge. According to Forskal, the *I. tinctoria* is much resorted to in Northern Africa.* By some of the natives of Yorruha it is named *ellu* or *elloh*, while the Mandingoes term it *كارو karro*. By the latter it is exclusively employed more on account of the beautiful dye which it gives to their tobes, than for any supposed remedial efficacy.

As in Popo and the other large towns in this Bight, the market of Whydah is amply supplied with game, poultry, and stock of various kinds. Cattle, sheep, pigs, and goats also exist in tolerable abundance, while fish of an excellent quality, with which the lagoons teem, yields an easy means of

* In his *Flora Egyptiaco Arabica*, he states it to be the نيلة (*Nile*) of the Arabs, and that it is exhibited "semina cum oleo sesami et sale ammoniaco mixta mane assumta, Tæniam expellunt. Diæta erit: aqua per triduum abstinere, alium cibum non edere, nisi panem potus coffeæ permittetur."—Page 138.

subsistence for the slave population. In this part of Dahomey the snake is considered an object of superstitious veneration, it is therefore fetished, and permitted to wander about within the precincts of the towns without molestation. Some writers assert that anotto is prepared here chiefly from the *Bixa Orellana*, its mode of manufacture, however, has hitherto escaped my notice. The soil of the interior is a rich argillaceous clay, of a reddish tint, intermixed with siliceous particles. The West African Company had latterly a fort at this place, but it is now abandoned and in ruins.

Porto Novo, the sea-port of the kingdom of Ardrah, is thirty miles from Whydah. The minor towns Appée and Jackin, the former three or four miles inland, and a solitary hill (Mt. Palaver), near the latter, are the only objects worthy of note, the intermediate coast still affording the same monotonous aspect. The capital of this territory is also termed Ardrah, and is built on the banks of a small river, that unites with another running into the Cradoo Lake. It enjoys a population of above eight thousand, who are a well-formed, active, and enterprising race. I may here remark, that the nomenclature of several towns, not only on this, but also on the Gold Coast, has been evidently derived from an oriental source. Ardrah, with one or two other towns, may be satisfactorily cited as the most obvious examples.

Badagry is a moderate-sized town, with a population of ten thousand. It is situate three miles

from the shore, on the western branch of the river Lagos, twelve miles to the eastward of Porto Novo, and is not much resorted to, unless by the Portuguese and French. A second hill (Mt. Badagry) may be observed near it. A sandy strip of land, covered with a thick sward of grass, intervenes between it and the beach; and the suburban buildings are partially concealed by young thickets of evergreen shrubs. In the vicinity of the town the stream expands into a somewhat shallow lagoon, from half to three-quarters of a mile in width, its banks at intervals being fringed with low brushwood, which serves as a secure retreat for the voracious alligators which infest its course. A Wesleyan missionary school has been recently established here, for the education and conversion of the natives, under the control of the Rev. T. Freeman, the indefatigable superintendent of the missions on the Gold Coast. When the slave trade was at its zenith, the Portuguese erected no less than five factories at this place, and the sale of human beings was carried on to an almost incredible amount. The upper layer of the soil in the circumjacent country has been stated to consist of sand, incorporated more or less with a reddish marl, on which it is usually based.

The unfortunate Capt. Clapperton with Richard Lander set out for Sackatoo from this town in December, 1825, and the brothers Lander followed this track in 1830, in their first expedition into the interior. The sovereign of Badagray pro-

fesses allegiance to that of Eyeo or Katunga, a metropolitan town lying some distance beyond the eastern range of the Kong mountains. From ninety to one hundred miles to the north-east of Badagry is the town of Abukuta, which, according to recent accounts, is not only a place of some magnitude, but contains a large population. It first excited attention from the visit of the Rev. T. Freeman, in 1842, who found there a number of liberated Akoo slaves who had emigrated from Sierra Leone and located themselves in these districts, preferring to remain under the protection of its king rather than reside in the more dangerous and insecure inland towns of Yorruba. Since its discovery, the significant title of Understone has been bestowed upon it, from the circumstance of its situation amid vast fragments of white granite, which also lie scattered around its outskirts in isolated masses. After passing a low thickly wooded shore to the extent of thirty-six miles, studded by a continual succession of picturesque villages, the river and port of Lagos successively engage our attention. The river Lagos, but three-quarters of a mile in width, forms the estuary of the Cradoo Lake, and from its shallowness is perfectly inaccessible to craft of any burthen. It is divided into two diverging streams, named East and West Lagos—the former running parallel with the shore from three to four miles distant, flows into the Rio Formosa; the other merges in a large expanse of water near Whydah. Adjoining its

embouchure, situated in $6^{\circ} 24'$ N. Lat. and $3^{\circ} 22'$ E. Long. is a small island, on the northern extremity of which the town of Lagos is founded. This place enjoys a lucrative commercial intercourse with the circumjacent countries by various creeks, whose tortuous branches meander in every direction, particularly towards Dahomey and Benin, which are from sixty to ninety miles to the eastward of it.

The diseases of the inhabitants of the Slave-coast differ but little from those observed in the numerous rivers of the Bights more to the southward. In the prædial and elevated inland districts they are less prevalent than in the maritime towns and villages, and moreover are not characterized by that asthenic type which accompanies those morbid affections that occur in the latter localities. Fetish and other superstitious ceremonies constitute the remedial treatment employed by the native doctors. In Yarruba, Benin, and a few of the neighbouring kingdoms, circumcision is performed on most of the males very early in infancy. Mr. Dalzell states, that this operation "is universally practised among the Dahomian subjects, but not at such an early age as among the Jews; the time of submitting to the operation being left to the boys themselves." A very curious custom, mentioned by this author, still exists among the younger females:—"Prolongatio videlicet artificialis labiorum pudendi, mammæ papillis simillima."*

* *History of Dahomey*, 1793. Introduction, page xviii.

Cradoo Lake is about fifty miles in length, and from four to seven in breadth. Several tributary streams empty their waters into it, after wandering through a series of fertile districts, and serve as the most easy medium for the conveyance of the native merchandize from one remote market to another. Its banks are covered by numberless flourishing villages, the inhabitants of which are solely devoted to agricultural and mercantile pursuits. Cradoo, the capital of these populous regions, lies in the Jaboo country, thirty-six miles from the outlet of the lake. As at most of the trading depôts in this Bight, the human species still remains one of the staple commodities of barter. The soil of the interior is light and sandy, and when denuded of its heavy timber and underwood, is richly productive.

Thirty miles to the eastward of Lagos is the petty village of Palma, and twenty one miles to the eastward of it is the town of Oudy or Oddy, beyond which detached clusters of mud habitations are occasionally perceptible, located on the verge of the sandy beach, and mostly concealed by the foliage of the adjacent woods. The general aspect of the coast from this portion to the Rio Formosa, a distance of thirty miles further to leeward, resembles the regions previously described, and is equally insalubrious.

In former times all the track of sea-coast between Cape St. Paul's and this river was designated in the nautical charts as the Slave-coast; modern

experience, however, has sufficiently shewn that this title has a much more extensive signification.

It may, perhaps, be advisable in this place to enter into a preliminary dissertation on some of those curious rites to which the negro female is liable in many parts of the African continent, in order that the subject, when briefly adverted to in succeeding pages, may be more fully understood.

Intelligent travellers have distinctly pointed out among barbarous nations, in different portions of the globe, faint traces of a descent from progenital sources, the elevated moral and physical characters of which are widely at variance with their modern condition and prospects. This retrogression from a superior intellectual and social position into the depths of profound barbarism has been referred to manifold causes. Apparently the most prominent are those gradual changes induced by the intervention of time, the dispersion and extinction of their primitive stock as a parent stem, and the detachment and consequent isolation of the successive offshoots from it, owing to their nomadic tendencies, and other circumstances, which contribute to still further their separation. The customs and modes of life also (from the diffusion and probable blending of these branches with other communities less civilized) have imperceptibly led to the deviation from their original characteristics, for, in proportion to the repeated migrations and fixed settlements in countries widely apart, these altera-

tions have proceeded to such an extent, that at length, with the exception of a few occasional traces, a permanent obliteration of the whole has been accomplished.

Historical fragments of past ages will furnish us with instructive proofs of the rise and decadence of numerous empires, whose intimacy with the arts and sciences were such as denoted no limited proficiency in the cultivation of them, and from the scattered remnants of which we may recognize how far the tide of civilization had advanced. The records of their existence will be found either in the pages of some contemporary writer, or, as above, in the peculiarities of those degenerate tribes who have descended from them. The retention and warm attachment to such modified customs has been well exemplified in many of the national traits that distinguish the natives of Western Africa; their exploration, therefore, may not unfrequently bring to light some of those vestiges of science which, although partially concealed under the garb of savage life, still afford abundant indications of an origin from an intelligent and more civilized race of people.

What is usually implied by the expression of the term circumcision, in reference to women, is merely the excision of the clitoris, and other organic structures connected with it. The excise process is not restricted to one particular part, but is more or less varied in conformity with the usages of the different countries in which it is pro-

moted. Under these modifications, it may be classed under four heads, viz. :—

1. Simple excision of the clitoris.
2. Excision of the nymphæ.
3. Excision of both nymphæ and clitoris.
4. Excision of a portion of the labia pudendi, with either or all of the preceding structures.

The circumcision of females is the ostensible remnant of some of those mysterious orgies which derive their origin from the remote periods of antiquity. Its history, therefore, is necessarily involved in deep obscurity, for as all the information to be gleaned on the subject is from its bare allusion in a few of the treatises of the early historians, it is of course but scanty. That it was secretly inculcated as one of those gloomy rites which the female proselyte had to undergo, as a preliminary measure, prior to her initiation into those dread mythological creeds, which in Egypt and the adjoining countries were swathed in the folds of an allegorical and almost impenetrable mysticism, is the most likely inference. Eventually the progressive decay of these religious institutions gradually led to its promulgation and practice among the masses of the people, for the priests who, independent of their scientific attainments, were also well versed in medicine, might have advocated its use, both in a moral and hygienic point of view, as conducive to the welfare of the female population. Mention is made of this singular custom in the pages of Strabo, the father of

geography, and also by Pliny and others. The former remarks, that it was generally performed among the Egyptians, who were at that period a far more enlightened people than the surrounding hordes. He states:—"Καὶ τουτο δε των ζηλουηενων μαλιστα παρ αυτοις (τοις Αιγυπτιοις), το παντα τρεφειν τα γεννωμενα παιδια, και το περιτεμνειν και τα θηλεα εκτεμνειν. Οπερ και τοις Ιουδαιοις νομιμον και ουτοι δε εισιν Αιγυπτιοι." Now, in this passage, to prevent any ambiguity that might arise in confounding this with the ordinary rite of male circumcision, he has discriminately applied the word *εκτεμνειν* to *excise*, in order the more clearly to illustrate his meaning. These distinctions are fully dwelt upon by Dr. Brown and Burkhardt, both of whom had travelled extensively in Northern Africa.

The first, and least objectionable, of these operations, is the one almost universally selected by those nations where such curious customs are permitted. It is fortunately not accompanied by any dangerous symptoms, a moderate febrile irritation, with painful tenderness and profuse suppuration, being the common termination. Whenever a lack of skill or manual dexterity prevails on the part of the operator, it assumes a more serious aspect, violent inflammation and sloughing of the circumjacent textures frequently supervening. This process is mostly carried into effect before puberty, but the age of the person is no obstacle to its com-

* Strabo, lib. 17, p. 284.

pletion should such be thought necessary. In Ebo, Old Calabar, and other parts of Western Africa, it occurs between the years of four and nine,—much, however, will depend in these cases on the locality, and the purpose for which it is intended. When in Calabar river, I had an opportunity of witnessing the mode of operation undertaken there, as elsewhere, by aged females. The girl having been placed on the knees of a woman, with the legs apart, the clitoris was diligently sought out (for in this, as in other subjects of tender age, from imperfect development it was sometimes difficult of detection), and upon discovery was seized forceps-like by two pieces of bamboo, or palm sticks, gently drawn forth, and severed by means of a sharp razor. The hæmorrhage was rather copious, but it was suffered to exhaust itself. Afterwards the parts were alternately bathed with warm and cold water, and the girl placed in the recumbent position. The surface of the body was then dotted over by some fetish preparation to avert the molestations of any malign influence, and in two or three days the little invalid was restored to her usual occupations. The clitoris here is termed Yientra, and its continuance in females approaching maturity is not unfrequently deemed a cause of reproach. This peculiar observance is popular in various parts of Arabia, Darfour, Kordofan, and among the Galla tribes of Abyssinia; also in several of the kingdoms of Soudan, in the Foulah and Mandingo countries, and in the Ebo's

of the Quorra, and the populations of those rivers connected with them.

The second division, or removal of the nymphæ alone, is rarely attempted on the same grounds as the previous operation: it is resorted to more as a surgical measure in those morbid states where the structure is the seat of hypertrophy or fungoid enlargement, and to which negro females are liable, either from excessive indulgence in venery, or from constitutional predisposition.

The ancient Egyptians, it would seem, practised, to a certain extent, this excisive process in cases where the nymphæ had become inordinately developed. Aëtius, an early Greek writer, who flourished near the termination of the fifth century, and had studied in his early years at the medical school of Alexandria, gives in his *Βιβλία Ἰατρικὰ Ἐκκαίδεκα* an interesting account of the peculiar charms and other superstitious observances then in vogue among the Egyptian physicians, for the successful treatment of disease, and particularly alludes to this morbid condition of the female organs of generation, with their removal, in the following words:—"Hæc in aliquid mulieribus ad tanta magnitudine ut deformitate ac pudore inducat. Quin et a vestimentorum contractu assiduo arrigitur, et ad venerem ac coitum proritat. Qua propter Ægyptiis usum est ut antequam exuberet amputetur, tunc, precipue quam nubiles virgines sunt elocandæ."* &c. There is every reason to

* Tetrabib iv. Sermon iv, p. 922.

infer that this is the operation more exclusively adopted by the Mandingo tribes, the females of which are also frequently liable to similar diseased formations.

The excision of these organs in conjunction with the clitoris, though rather less common, is maintained in many of the countries where similar ordinances are instituted and upheld. In general, it is effected at the desire of the woman herself, either in complaisance to the hereditary customs of the family to which she belongs, or to the arbitrary caprices of her superiors, and as a means of ingratiating into the favour of her liege master, who may allude to its consummation as a proof of her devotion to his wishes; not that this latter event is dependent on her option, for in the African code of domestic regulations, it is freely understood that the hints of a husband are tantamount to law. Social life, in most of the pagan towns of Western Africa, is darkened by scenes of the grossest demoralization, and its annals teem with pictures of such a licentious and depraved character, that a narrative of them would scarcely command credibility. An illicit and promiscuous sexual intercourse is constantly carried on by nearly all classes of slave subjects, who, not fettered by any moral obligations, and solely intent on the gratification of their passions, give them an unrestrained rein long before the age of puberty. In the younger branches of families more immediately under the supervision of their chiefs, any dereliction from an

established probation of chastity in these respects is punished with fearful severity, both in boys and girls, especially if any of the latter is a favourite domestic, or near relative, since the license is only justifiably allowed in individuals who have attained a proper maturity. The evil effects of this immorality, however, are sensibly felt by those persons who are accustomed to procure and retail them (*i. e.* the female slaves,) in the light of a commodity for traffic. Slave merchants of the interior when they therefore visit the marts for the selection of young females, are amply aware of the laxity of frame and physical deterioration that ensue from the premature development of form in these cases; and by a careful series of manipulations over various portions of the body, determine how far they may venture on the price, should the vendor not guarantee their virginity. In spite of the most stringent precautions, a clandestine intercourse is more or less prevalent among the sexes, from the opportune temptations afforded them; therefore, for the prevention of these delinquencies, the cruel and painful process (the concluding division) is had recourse to.

Dr. Brown, who resided some time in Darfour, North Africa, has given the first account of this operation. He remarks that the clitoris is cut off at the age of eight or nine years, and the term employed for denoting the performance is *خفص* *Chafadh*, while the appellation conferred on the person who operates is that of *خفصة* *Chafadhah*. The object

of the first excision is for the purpose of "producing an artificial impediment in the vagina, to prevent sexual intercourse, in order not to impair the value of the slaves. This operation, like the former, is performed at all ages, from eight to sixteen, but commonly, from eleven to twelve. * * * The operation was performed by a woman, and some of them complained much at the pain both at and after it: they were prevented from locomotion, but permitted to eat meat. The parts were washed every twelve hours with warm water, which profuse perspiration rendered necessary. At the end of eight days, the greater part (of those operated upon) were in a condition to walk; and, liberated from their confinement, three or four of them remained under restraint till the thirteenth day."* Dr. Brown, however, does not appear to have thoroughly understood the details of this operation, inasmuch as they are two distinct operations, performed in many countries at different intervals, and the solitary excision of the clitoris is no obstacle to copulation, unless some of the adjoining textures have been removed with it.

Burckhardt, in allusion to this subject, observes,—"Among the slave-girls who arrive at Shendy and Siout, there are several who are called *مُخَيِّط* *Mukhaeyt* (consutæ), from an operation which has been described by Mr. Brown," and that many females of Arab origin, inhabiting the "Western bank of the Nile, from Thebes as high as the

* Brown's Travels in Africa, p. 397.

Cataracts, and generally those of all the people to the south of Senne and Esne, as far as Sennaar, undergo circumcision, or rather excision, at the age of from three to six years. Girls thus treated are also called *Mukhaeyt*, but their state is quite different from that of the slave girls just mentioned.”*

In some of the countries of Western Africa, another and more inhuman barbarity is perpetrated on girls of high birth, who have been guilty of prostitution, and is often succeeded either by a partial agglutination of the vaginal membranes, or a permanent obliteration of the canal. It consists in the introduction into the vagina of the unripe pods of the *capsicum frutescens*, or bird pepper, beaten into a soft mass, so that, from its acrid principle, a greater amount of suffering may be inflicted, in order to deter the fair debauchee from

* He remarks that the results of the former operation are as follows:—
Cicatrix post excisionem clitoridis parietes ipsos vaginae, foramine parvo relicto, inter se glutinat. Cum tempus ad nuptiarum adveniat membranem a quâ vaginae clauditur, coram pluribus pronubis inciditur sponso ipso adjuvante. Interdum evenit ut operationem efficere, nequeant sine ope mulieris aliquæ expertæ quæ scalpello, partes in vaginâ profundius rescindit. Maritus crastinâ die cum uxore plenumque habitat, unde illa Araborum sententiæ **مسئل ليلة الفتوح** *Leilat-ed-dokhle messel leilat el fatouh*, i.e. post die aperturæ, dies initus. Ex hoc consuetudine fit ut sponsus nunquam decipitur ex hoc fit ut in Egypto superiori innuptæ repulsare lascivias hominem parum student dicentes. **تبوسي ولا تخرقني**

Tabousny wala takergany, sed quantum eis sit unita hæc continentia post matrimonium demonstrant libidine quam maxime indulgentes.”
—*Travels in Nubia*, p. 331-2.

committing any further excesses. The pain from the active inflammation thus induced is of the most severe character. I was informed by one of the principal inhabitants of the comparatively civilized town of Clarence, Fernando Po, that this course of punishment is now and then had recourse to, to check any similar irregularities on the part of the female.

During my stay in those pagan towns where female circumcision is supported, I have frequently attempted to procure information of its early origin, but without success; the invariable answer to my queries was, that it had been transmitted to them from their forefathers, and further than this they knew not. Some chiefs, indeed, have told me that it was intended to do away with those criminal liaisons which are apt to occur where a number of females are congregated under the roof of one man. I am, however, very sceptical as to the truth of this explanation, although it may be admitted as one of the causes of its present toleration.

There are, I think, sufficient grounds for the assumption of the belief, that in past ages, among more civilised communities, it constituted no unimportant branch of medical hygiene, and that probably, at some future period, fragmentary data may more explicitly unfold the use and purport of this singular custom,—one among the many that has been faithfully preserved by the African races through the lapse of centuries, from a source so

distant and mysterious, as almost to set at defiance the researches of the most profound inquirer.

In most of these countries, live stock, game, &c., may be purchased at comparatively trifling prices, while the greater number of the edible fruits and vegetables that abound in the West Indies and tropical America can be procured without the slightest difficulty. To enumerate the whole would occupy too much space; a reference, therefore, to the most conspicuous productions of one place will serve as a guide for others, since the majority are more or less distributed throughout the other regions of central Africa. With the plants common to the Slave Coast may be included the *Zingiber officinale*,¹ *Holcus Spicata*,² *Chrysophyllum Cainito*,³ *Tamarindus Indica*,⁴ *Sarcocephalus esculentus*,⁵ *Jatropha Janipha*,⁶ *Anacardium Occidentale*,⁷ *Cucurbita melopepo*,⁸ *Annona Muricata*,⁹ *Gossipium Herbaceum*,¹⁰ *Ricinus Africanus*,¹¹ &c. The *Cucurbita Citrullus*, which profusely flourishes in most of the countries of Western Africa, is highly esteemed by the natives for its antiseptic, refrigerant, and antifebrile effects. It may be found in nearly all the cultivated inland districts on this and the Gold Coast. By the Arabs it is named بطيخ زقي *Bateekh ziche*, and by the Egyptian Arabs برطيخ *Barteech*. According to Forskal, it is also known under the names

¹ Common ginger. ² Kous-kous plant. ³ Star apple. ⁴ Tamarind tree. ⁵ African peach. ⁶ Sweet Cassada. ⁷ Cashew nut. ⁸ Squash. ⁹ Soursop tree. ¹⁰ Cotton plant. ¹¹ African castor oil shrub.

شُرَيْخ *Schurredj* and كَاش *Kash*. It is frequently alluded to in conjunction with other plants included in the *Cucurbitaceæ* in the writings of the Arabian physicians. Rhazes, in a work entitled *Kitab fil judrie wul husbah*, &c., في الجدري و الحصبة, كتاب says that—"Aqua etiam cucurbitæ et aqua peponis Indi, et aqua cucumeris anguini et mucilago seminum psyllii et his similia, &c.," were remedies advantageously administered in the different stages of small pox and measles. Avicenna, in his well known *Canons of Medicine*, الصب قانون في mentions several species of *Cucurbita*, under the names of *Batiech*, *Batheca*, *Charha*, &c., and recommends preparations of them in various maladies. In Egypt and other parts of northern Africa it is resorted to by the common people as a medicine in ardent fevers.* The cotton shrub, *Gossipium arboreum*, furnishes the raw material from which the celebrated Jaboo cloths are manufactured. These fabrics surpass the British cotton goods in strength and firmness of texture, but are inferior to them in fineness of execution. The *Zea Mays*¹ is grown in immense quantities, and is used not only as an article of food, but also of commerce. The *Allium Ascalonicum*, *Brassica Oleracea*, with a few other culinary vegetables, were originally imported from the Cape de Verd

* "For this purpose they have a variety that is softer and more juicy than the common sort; when this is very ripe, or almost putrid, they collect the juice, and mix with it rose-water and a little sugar." *Lond. Cyclop. of Plants*, p. 809. ¹ Maize.

Isles and Europe, and have now become naturalized, and are largely cultivated in the gardens of the natives. In the more inland provinces of Dahomey, Mahé and Yarriba, the *Bassia Parkia*, or shea butter tree, may be found in abundance, the fruit being used by the natives for similar purposes as that from the oil-palm tree.

The Rio Formosa is better known under its common appellation of Benin River. It commences the series of navigable streams more intimately connected with the Niger, and was, during the last two centuries, a famous mart for the purchase and exportation of slaves. It is now but rarely frequented for such purposes, a more legitimate trade, which had been irregularly carried on shortly after its first discovery, having superseded this traffic in the human species. If we can credit Di Barros, it was either this or the Bonny River which was explored by Alfonso de Aveiro in 1486, in consequence of the king of the country requesting to be instructed in the Christian religion: he also states that an embassy was sent many leagues into the interior to a monarch of the name of Ogane, to whom the kingdom of Benin was at that period tributary. In Hackluyt's *Collection of Voyages* there is a very quaint and curious description of Benin River, from which we may glean much useful information. It appears that Capt. Wyndham visited it so early as 1553, in company with a Portuguese trader, named Antonio Anes Pinteado,

for Mallagetta pepper, and from this voyage may therefore be dated the commencement of the English commerce. In 1588, a Capt. Walshe was trading here, and again in 1590; in both these voyages he lost the greater number of his men, but fully freighted his ship with Jaboo cloths, oil, pepper, and ivory. At present, very little trade is carried on with the natives, three or four British vessels alone monopolizing its exports, which consist chiefly of palm oil and ivory.

The term Rio Formosa is of Portuguese origin, and signifies in that language, a beautiful river. It has, however, been employed more to characterise the bold and open expanse of water, than any picturesque scenery, unless the wild and desolate forests that fringe its banks be dignified by its assumption. At its junction with the ocean, this river is one mile and three quarters in breadth, but as it recedes towards the interior, proportionably diminishes in size, and at Youngtown, a village distant from fifteen to twenty miles from its mouth, divides into three terminal branches, the first leading to Gatto, a small trading port in the kingdom of Benin, the second, a continuation of the main trunk penetrating beyond the Subo country, and taking its source in the mountainous districts north-west of the Quorra, and the third, or last, termed the Warrée or Youngtown creek, that joins the Quorra, a few miles below the town of Ebo.

North-west head, an extreme projection of the land at the entrance of the river, is situated in $5^{\circ} 46'$ N. Lat. and $5^{\circ} 4'$ E. Long. Like Cape St. Mary in the Gambia, it may be stated to be the most healthy spot in the river, being fully exposed to the daily sea breeze, and less affected by those pestiferous south-east winds, so detrimental to all Europeans who visit here. From this point, a bar of heavy mud and sand extends to Salt-town, on the opposite side, partially obstructing its entrance, and on which, in the rainy season, a tremendous sea breaks with a resonance distinctly audible for several miles inland. A small village named Georgetown is located on this promontory, in close proximity to which may be distinguished many graceful trees, intermingled with the sombre foliage of the mangrove bushes; the most prominent are the *Elais Guineensis*,¹ *Cocos nucifera*,² *Musa sapientum*,³ *Sagus vinifera*,⁴ *Psidium pyriferrum*,⁵ &c. Palm oil is universally employed by all the negroes in these and other maritime countries of equatorial Africa, not only for culinary preparations, but also for certain medicinal powers. When procured with these objects, it differs considerably from the article of commerce, being of superior quality, owing doubtless to a more careful manufacture from the nut. The distinction consists in its exemption from the ordinary adulterations met with in the latter, while it possesses a

¹ Palm oil tree. ² Cocoa-nut tree. ³ Plaintain. ⁴ Wine palm tree. ⁵ Guava.

greater degree of fluidity, conjoined with a bright and clearer colour, without any of that rancid or nauseating odour so peculiar to the other. When blended with mucilaginous esculents, it constitutes a very palatable soup, and is as conducive to the health of the native African as the other oleaginous products of the south of Europe are to its white inhabitants.

A narrow sandy beach, with a substratum of hard black clay, stretches from this place to Fish-town, about a mile up the river. Previous to the year 1818, a village similarly designated existed on the site of the present one, which was burnt and destroyed with appropriate ceremonies by a solemn conclave of fetish men and chiefs, in order to appease the Mallaku or evil spirit, who was supposed to have prevented the white traders from entering the river. This malefic deity seems however to have been actuated more by the superstitious fears and caprices of his worldly representatives when he demanded, as a propitiatory offering, the destruction of this miserable settlement. Judging from the number of women and children I observed about the place in 1839, there was every reason to believe that it had already far exceeded its predecessor, not only in size, but also in population.

The shore from this place to Jacqua creek is composed principally of alluvial deposits, covered by dwarf mangroves, that project so far into the stream as to conceal its banks; and this is the common appearance throughout the river, except

in those localities inhabited by the natives. At the aperture of the above creek two English factories are erected, in each of which a few white artificers and Kroomen reside, under the superintendence of a head factor. These edifices are commodiously built of wood, somewhat after the Spanish style, and contain a number of apartments on a middle story, elevated above the adjoining swamps. They are five miles distant from the bar.

Jacqua, or Waccos, is the largest town in the kingdom of Warrée. It is erected on the right bank of a narrow tortuous stream, in a low and impenetrable morass, two miles from the river. The population amounts to near two thousand. The diseases to which the inhabitants of this part of the river are subject, originate more from the humid and confined atmosphere of the locality in which they live, than from any other cause: their type is usually asthenic, but it is greatly modified by change of seasons, and the prevalence of rains. Syphilis is perhaps the most frequent and fatal of those maladies to which the male inhabitants are liable, and predominates more among them than among the females. Many are cut off very early in life from want of the necessary remedial applications, and it is not uncommon to meet with cases which have continued during nearly two-thirds of the patient's existence. The worst forms of syphilitic disease which have come under my notice, have been the foul and malignant phagedenic

ulcers that indiscriminately attack both sexes. Gonorrhœa virulenta, nodes, cutaneous eruptions, and, indeed, all the sequelæ of syphilis in multiform varieties, are extremely prevalent, and not unfrequently resist the most energetic and judicious treatment of the European surgeon. In the native cure of such affections, superstition exercises her delusive sway; charms, amulets, with other fetish remedies, are employed *ad libitum* by designing priests, whose useless mummeries are calculated to afford but a transitory hope of any other than a fatal termination. The dracunculus, or Guinea worm, is but rarely seen in this part of Africa, being restricted more to the natives of the interior, and the Gold and Windward coasts. Two cases only came under my care in Jacqua-town, in one of which I had an opportunity of witnessing a country operation for the extirpation of these vermicular parasites. A small semilunar incision was first made in the skin of the forearm, to expose the extremity of the worm, and moderate pressure used to facilitate its protrusion; it was then seized, and cautiously drawn forth to the extent of one or two inches. Two ligatures, constructed from the exsiccated fibres of some gramineous plant, were next applied to that portion of the worm nearest the orifice in the skin, the other part being nipped off; the extremities of both of these ligatures were of sufficient length to encircle the limb, round which they were fastened. A young plaintain leaf, smeared over with palm oil,

was then placed over the wound, and friction carefully employed with the same oleaginous fluid on the skin, along the course of the worm. This process was daily performed, and a small portion of the worm regularly exposed, until the whole was gradually withdrawn; a perfect cure being the result.

On the environs of Jacqua are several enclosures for the cultivation of the *Dioscorea bulbifera*,¹ *Musa paradisiaca*,² *Capsicum annuum*,³ *Hibiscus esculentus*,⁴ &c. The *Citrus limetta*,⁵ *Jatropha janipha*,⁶ with several huge trees belonging to the *Malvaceæ* occasionally intersprinkled with the chandelier tree, *Pandanus candelabrum*, may be observed amid the mass of human habitations that line both sides of one long avenue or street, which in the rainy season is partly inundated with water. From the *Jatropha manihot*, or another poisonous species of Cassada, is prepared manioc or mandioca, an article of food constantly used on board the merchant vessels for the feeding of live stock. The natives designate this preparation by the word *Farina*, originally introduced by the early Portuguese traders, and derived from the Brazilian term *Farinha de pao*, or meal of wood. In Benin and Warrée, when any great dearth of vegetable food prevailed, it was given to the slaves, and is now occasionally consumed by them. Europeans ought to avoid partaking of it in any form, since it is apt

¹ Yam. ² Banana tree. ³ Bird pepper. ⁴ Ochro. ⁵ Lime tree.

⁶ Sweet cassada.

to create, even when taken in small quantities, colic, diarrhœa, and other distressing symptoms, and finally brings on dysentery. Formerly, when any difficulty existed in obtaining provisions for the slave ships, farina, from its abundance, was employed as a substitute for the support of their human cargoes. From its being very hastily and imperfectly made, the consequence was, that, before two-thirds of the voyage had been completed, nearly one-half of the wretched beings confined in these floating prisons perished from dysentery, and other enteritic affections. Throughout these swampy regions an apparently ceaseless growth of the *Rhizophora mangle* (common mangrove), effectually conceals most objects that exist in their immediate vicinity. They constitute two-thirds of the vast forests that clothe the maritime lowlands of equatorial Africa.

The same low and unhealthy tract of country, with two or three intersecting creeks, extends for some distance beyond Reggio, an insignificant village attached to the kingdom of Benin. It is situated on a central point of land at the confluence of the Gatto Creek with the river. The intrepid traveller, Belzoni, to whom we are so much indebted for the interesting researches into the antiquities of Egypt and northern Africa, expired at Agatto from an attack of dysentery, after an abortive attempt to penetrate into the Haussa country. His solitary grave on the outskirts of the town may still be seen; an elevated

mound of earth, overrun with weeds, with the fragment of a decayed wooden cross, are the only traces that now indicate the spot. Above Reggio the continuation of Benin river bends east-north-east, and about forty miles from the sea bifurcates into two branches, both of which were first explored by the enterprising Mr. Becroft in 1840, who has satisfactorily proved that they had no communication with the river Quorra, as had been previously supposed.

The Subo country consists of an extensive series of fertile plains, thirty miles above Reggio, beautifully ornamented with park-like clumps of trees, and verdure of the freshest tint. The plantations of the natives for the production of yams, plantains, cassava, &c., occupy the inferior districts, and enjoy a high reputation for salubrity, inasmuch as most invalids resort there in all protracted cases of sickness, and generally with most favourable results. From the purity of the water of the river as it flows through these regions, it has been selected to provide for the wants of the homeward-bound vessels, which are often in the greatest difficulties from a deficiency in this necessary article.

Youngtown, or Newtown, is another native village built on the verge of a swamp, at the entrance of the creek leading to Warrée, and directly opposite the town of Reggio. Towards the close of the last century it was the usual custom for slavers and trading vessels to anchor

abreast of this village, and the traffic which originated from these sources tended to elevate it into a place of some repute; accordingly, we find, in several old works, minute directions given for the attainment of its anchorage. In proportion, however, as the slave trade declined, this part of the river became less and less frequented, and was finally deserted on account of its insalubrity, the palm oil vessels preferring to remain near the mouth of the river, where the danger from noxious exhalations and other morbid influences was considerably diminished by the cool and invigorating sea breezes, and the more open expanse of the stream. The population of Youngtown varies from six hundred to one thousand, and, from the unhealthy situation, is exposed to much sickness. Lepra, psoriasis, scabies, frambæsia, and other morbid affections of the skin, are common not only in these but in the other districts of the Delta of the Quorra. With the exception of syphilitic diseases, these may in general be estimated as the most numerous. Variola occasionally occurs after long periods, when it assumes an epidemic character, invariably sweeping off two-thirds of the inhabitants of those villages exposed to its pestilential visitations. Several years since variola of a peculiar malignant type broke out in Soudan, and passed from thence into the neighbouring kingdoms of Haussa and Benin, and so fearful were the ravages committed in its progress, that the majority of the Warrée towns narrowly escaped

depopulation. Among the native tribes that inhabit the maritime regions of equinoctial Africa, there is, perhaps, no class of diseases that creates more terror or dread than the prevalence of these variolous epidemics. As but comparatively few negroes escape with life, when once attacked by epidemic small-pox, this circumstance may satisfactorily explain why so few are pitted with its characteristic marks, and also account for the custom that prevails, in some countries, of swearing by this malady; an oath which, from its dire import, is held inviolate. The other Exanthemata but rarely if ever appear.

Warrée, Owarrée, or Jackrée, is the metropolitan town of this river, and the seat of government. It stands on the northern side of the island of Warrée, an elevated tract of land separated from the circumjacent marshes by a bifurcation of the creek eighty or ninety miles to the eastward of Youngtown; both branches again uniting into one stream, that enters the Quorra a short distance below Ebo, as above mentioned. This isle, from four to five miles in length, furnishes many beautiful and picturesque specimens of African scenery, and is richly endowed with all the wild exuberance of tropical vegetation. Its soil is a rich argillaceous loam with a substratum of red clay, of a moderate altitude above the surrounding mangrove forests, and alternately embellished by native farms and broken woodlands, that remind the stranger of a more northern country. The site of the town is

one of the most eligible that could have been selected, being judiciously located on a gentle slope that commands both ingress and egress to each of the two streams. The number of its inhabitants amounts to six thousand.

Among the variety of plants and trees indigenous to Warrée may be enumerated the *Justicia elegans*,¹ *Gomphia glaberrima*,² *Inga biglobosa*, *Robinia violacea*, *Clerodendron volubile*, *Eugenia Owarriensis*, *Puella elongata*, with numerous species of *Loranthæ*, *Hibiscus*, *Ipomea*, &c. The legume of the *Spathodea campanulata* is used as one of the chief adjuncts in the noisy portion of the fetish rites, the priests constantly shaking the dry seeds within their cells. The well known *Adansonia digitata*, or baobab, a magnificent tree which grows to a colossal magnitude in Bornou, Congo, Bambarra, and most of the elevated sandstone regions nearer the coast, is also found here. Several portions of it are medicinally employed by the negroes in various maladies. In Soudan it is recognised under the title of *kouka* or *kuka*, and according to Clapperton, both the leaves and fruit "are, to a certain extent, considered as medicinal. The leaves mixed with trona and gussub are given to horses and camels, both for the purpose of fattening these animals, and as a cooling aperient. They are administered to the former in balls, and to the latter

¹ Button flower. ² Locust tree, now named *Parkia Africana*, in honour of the lamented traveller, Mungo Park. It is the *Doura* of Soudan.

as a drench. The white mealy part of the fruit is very pleasant to the taste, and forms with water an agreeable acidulous beverage, which the natives, whose libidinous propensities incline them to such remarks, allege to possess the virtue of relieving impotency.* By the Mandingo and Wolof tribes in northern Africa it is highly appreciated, not only for the valuable remedial powers which they assert it enjoys, but also on account of the remarkable variety of useful purposes to which it has been applied. The Joloffs in the Gambia term it *Lalla*, and invariably procure the leaves to make fomentations and poultices, from which they derive considerable benefit in rheumatic and other painful affections of the limbs, and likewise in those foul and irritable ulcers to which they are occasionally liable. In the early stages of variola, in order to promote the rapid maturation of the vesicles, the internal pulpy portion of the ripe fruit is dissolved in water until it has acquired the consistency of syrup; it is then repeatedly smeared over various portions of the body, particularly the face, so that the greater part of the tegumentary tissues become concealed under this exsiccated crust, which remains to that period when the eruption has nearly disappeared. The fresh leaves are also used to flavour various soups and other culinary preparations, and they frequently constitute one of the ingredients which compose those prophylactic medicines ordinarily in use amongst the natives. The

* *Journey from Kouka to Murmur*, p. 11.

Bombax ceiba,¹ *Napoleana imperialis*, *Indigofera endecaphylla*, *Omphalocarpum procerum*,² *Nymphaea Lotus*,³ flourish more or less in the cultivated districts of the island, with the ordinary accompaniment of cocoa-nut, banana and plaintain groves, a class of trees which on the coast of Western Africa usually indicate the propinquity of native villages and plantations.

In Benin and Warrée circumcision is performed on all the males at a very early age, and the surface of the body, shortly after the operation, anointed by a white carbonaceous substance mixed with palm oil, which, from its reputed prophylactic virtues, has been thought to obviate any injurious consequences that might otherwise ensue.

Excision of the clitoris, a rite universally practised by the females of other nations more to the southward, does not appear to be implicitly followed by the women in this river, unless it is by those who have been formerly resident in some of the Ebo towns on the Quorra. A process, however, of quite a dissimilar character, is adopted by many females of the Jaboo country, and the result is, I believe, considered by them as ornamental; the clitoris is artificially elongated by means of

¹ Silk cotton tree. ² Gourd tree. ³ Egyptian lotus. This plant named *نوفر* *Naufar*, by the Arabs, was held in great veneration and esteem by the ancient Egyptians, who placed its flowers in vases that occupied the most prominent positions in their fêtes, during the continuance of which, it was occasionally presented by the slaves of the owner of the mansion to his guests, and also to their master, as a token of hospitality or respect.

small weights appended to it, and gradually increased in size until it has been lengthened several inches. Instances have come under my notice in which ulceration had gone on to such an extent, as to require its immediate removal. In girls, the catamenia generally appear about the eleventh or twelfth year, but their commencement and subsequent continuance often depend on the mode of life, habits, and constitutional peculiarities of the different grades of females, and likewise on those climateric agencies which so materially modify this uterine secretion. Pleuritis, pneumonia, phthisis pulmonalis, with other morbid conditions of the parenchyma of the lungs, are of greater frequency during the cold rainy months, and are accompanied by more vascular excitement than in the similar affections that occur in dry. Dysentery, diarrhœa, colic, and numerous disorders of the chylopoetic viscera, may be also more prominently noticed in the rainy months. Phthisis and dysentery are the most fatal complaints in low marshy localities, and carry off numbers of the aged and debilitated slaves. Of the species of intestinal worms, teniæ and ascarides are the most common, particularly the former, and the populations of several inland countries not unfrequently suffer severely from their continual existence. Women, and the inferior class of slaves, who live exclusively on vegetable food without condiments, are those chiefly affected. More recently, the introduction and plentiful supply of European salt has somewhat diminished

their occurrence. Hepatitis, induration, and other organic lesions of the liver, are rapidly increasing among the male inhabitants, from their immoderate use of ardent spirits of a very inferior quality, now abundantly brought by European traders for barter. Dyspeptic, and a wide range of nervous disorders, equally emanate from the same stimulant causes. Cerebral diseases of a very serious nature seldom come under observation; but cephalalgia from febrile disturbance, constipation, and exposure to the sun, is extremely prevalent in both sexes, and at all ages. The custom of repeatedly shaving the head of every infant for several months, nay, even years, after birth, is one universally in vogue throughout these countries of the Bights, and is evidently regarded in the light of a prophylactic measure of no mean value. I may here observe, that most of the children of these maritime regions possess a weak and delicate frame, and do not enjoy good health until they have arrived at a mature age. Maniacal diseases are uncommon, and a remarkable exemption takes place from idiocy in most of the populations of the towns previously mentioned; whether children so affected are put to death, as some native doctors have gravely asserted, appears to me very questionable, if applied to this river; probably such may be the case in others.

One of those prominent traits which may be considered almost national or hereditary among the negro females of Warrée, as elsewhere in

Western Africa, consists in the lengthened period they are allowed to suckle their offspring, which, in the populations of the Delta, are often protracted until they have attained the age of two or more years. The reasons they adduce in explanation of their adherence to this custom are, that the infant, under this simple yet invigorating regimen, is less subject to disease, and as it gradually acquires vigour and tonicity of frame, is better enabled to withstand those miasmal and other noxious exhalations that emanate from the swampy localities which they inhabit. Moreover, they remark, that should the ordinary food of adults be administered at a too tender age, and the stomach thereby overloaded with heavy ingesta, the opposite result would occur, and the mortality, great as it now is, would be increased threefold. By the Mahometan nations in northern and central Africa a similar custom is implicitly adopted; perhaps, more in conformity with the precepts of the Alkoran, which ordains that mothers shall suckle their children to that age of maturity which may be deemed requisite. From the period when the pregnancy of the female becomes apparent, she is restricted from any future cohabitation with her husband, which law is continued in force until she has finally weaned the child. This observance in some countries is more rigidly enforced in consequence of the prevalent impression, that should any intercourse take place between the parties, it would either tend to the immediate destruction of the infant or

seriously affect its future existence. It is probable, that under these views, polygamy, which so extensively prevails in equatorial Africa, becomes to a certain extent necessary.

Chronic ulcers, especially on the lower extremities, are frequent, and well-marked cases of elephantiasis may sometimes be seen in the slaves newly imported from Soudan. These comprehend the outline of the principal maladies that exist in the Rio Formosa and slave coast, but there are others, also endemical to them, to which I shall advert on a future occasion.

From Youngtown seaward, the right, or, as it is denominated, the Boobee side of the river, presents precisely a similar aspect to the one lately described. Shallow indentations and occasional projections of the banks, clothed by young mangrove bushes, with a solitary creek here and there, are the only objects that meet the gaze from the above town to Callebar Creek, a distance of ten or twelve miles. This creek nearly faces the one leading to Jacqua, and is of greater magnitude than the others in this part of the stream. It has been supposed to communicate with the Rio Esclavos, as canoes from that river frequently visit the factories by this route. An inconsiderable village, named Battarra, is situated on the left bank, near the entrance, and a remarkable promontory, termed Jo Point, may be observed at its confluence with the river: in the vicinage of the latter is the town of Boobee. Bubie, or Boobee, is now the principal

seaport of the kingdom of Warrée: it is erected on the margin of the mangrove swamps, with a fine sandy beach in front, which also continues down the river to south-east point. It contains a population of seven hundred, who are an indolent and evil-disposed people. A small rivulet separates it from Ullaby, a miserable village, near which are the ruins of an old English factory. Salt-town lies a mile and a half distant, at the mouth of the river opposite north-west point. No mercantile establishment existed in this river before 1786, when the French erected a fort, adjoining one of the villages near its embouchure, which was destroyed by the British cruisers in 1793. It may be necessary to state that the most healthy anchorage for vessels visiting this stream is between the towns of Boobee and Salt-town.

The natives of the Rio Formosa are of Ebo descent, and partake of the same moral and physical traits that distinguish the people of that country. In place of the short muscular figure, thick lips, and flat expanded nose, of the Krooman, they are tall, slim, and more symmetrically moulded, with a skin varying from a light yellow to a dark brown, and a countenance the melancholic expression of which is rather prepossessing than otherwise. Yams, plaintains, maize, cassava, various kinds of fruits, fish, fowls, monkeys, goats, &c., prepared with palm oil, and highly seasoned by pepper, comprise the diet on which they uniformly subsist. The beverage in general use is the exuded sap of

several palm trees: the *Sagus vinifera* and *Elais guineensis* are those from which it is usually drawn. The liquor thus obtained is allowed to ferment, and hence it possesses those intoxicating powers which render it the favourite drink of all the inhabitants of the Western coast of Africa. It is also much valued for its diuretic properties, and is administered in different modes with other native medicines. The *Cypræa moneta*, or East India cowrie, constitutes the currency of the country.

Notwithstanding the conflicting statements that have been promulgated from time to time respecting the salubrity of several rivers and other places frequented by the white traders in this portion of Western Africa, the Rio Formosa will be found, upon dispassionate inquiry, to be the most unhealthy. The only streams in the Bights which resemble it in point of insalubrity are the Rio Nun and New Callabar; but the sacrifice of European life in them, although considerable, falls short of that observed in the Benin river. The constant prevalence of a class of insidious febrile diseases (particularly remittent fevers), whose adynamic type, rapid career, and other pathological features differing so greatly from those of other tropical climes, sufficiently stamp it with that odious celebrity now widely diffused and too justly merited. Our colonial settlements in the Gambia and Sierra Leone, from the severe ravages of occasional epidemics, have also been invested with a certain degree of ill fame; but they, if placed in com-

parison with the river I have been lately describing, would be deemed far more salubrious. It must, however, be borne in mind, that while these maritime districts are thus abundantly fraught with those influences which give rise to this unfavourable condition, their deleterious effects have been much augmented by a series of petty and vexatious annoyances to which all Europeans are subject who come within their sphere. The slimy mudbanks and alluvial swamps, it is well known, generate myriads of musquitoes and sandflies, and these insects so vigorously attack all who reside where they abound, as to prove exceedingly troublesome. In vain the wearied seaman seeks for repose; his winged tormentors multiply as the night advances, and, ever on the alert, incessantly hover around him, until he is at length forced to succumb to their harassing inflictions, and unwillingly hastens upon deck, there to await, in no happy mood, the break of morn. Heavy toil by day, with broken and unrefreshing slumbers, will soon undermine the strength of the most hardy; and hence it is that these, in conjunction with other apparently trivial causes, amply predispose the unseasoned stranger to the attacks of endemic typhoid affections, from which so few have as yet recovered. Barbot, in allusion to this subject, truly remarks, "that the lands on each side of the river are very woody, which breeds those tormenting vermin in such immense numbers, that they attack our sailors at night on all sides, and so pester them,

that many the next morning are not to be known by their features, depriving them at the same time of their natural rest, which, together with the unwholesome air, occasions a great mortality among our Europeans, some sloops or ships in one voyage often losing one-half of their crews, and others more, and the survivors remaining very weak and sickly, which strikes such a terror into sailors, that few are willing to serve in such voyages, and the boldest always afraid of their lives."*

When I visited this river in 1839, I found two vessels moored a short distance from its mouth, one of which, within the space of five months, had buried two entire crews, a solitary person alone surviving; the other, which had entered at a much later period, had been similarly deprived of one-half of its men, and the remainder were in such a debilitated condition, as to be incapable of undertaking any active or laborious duty. Another vessel sailed from this port, previously to my arrival, in such a deplorable state, as to be solely dependent on the aid of Kroomen to perform the voyage homewards. After a stay of several weeks at the anchorage opposite Jacqua creek, the ship to which I was attached became so unhealthy, that we were under the necessity of recrossing the bar into a purer atmosphere, having lost one-third out of a complement of eighteen men. And yet, amid these regions so rife with disease and death, I have known

* Description of the Coasts of North and South Guinea, book iv. p. 319.

Europeans reside for a number of years in the enjoyment of good health, from the simple secret of moderately conforming to the habits of the natives as regards the diet, exercise, and attention to the due performance of the cutaneous functions. The plan of treatment I then pursued in the cases of fever which came under my care, was local and general blood-letting, saline purgatives, calomel in large doses, &c.; in fact, that treatment sanctioned by the most experienced writers on tropical diseases of a similar nature. I regret to state that in these, as in numerous other instances, this system of treatment was evidently one which possessed no power of controlling the progress of the remittent fevers of inter-tropical Africa.

Perhaps in no part of the African continent is the medical profession held in higher estimation than by the negro tribes of the kingdoms near the sea-coast. In most of the rivers of the Bights the medical officer, if he were so inclined, could easily convert his ship into a lazarette, from the influx of patients that would voluntarily place themselves under his sanatory regulations. Natives of every rank express the greatest confidence in his skill, and the efficacy of those remedial measures exhibited for their benefit; and should such unfortunately fail of affording the desired relief, the case is considered by them as hopeless. Whenever, therefore, the surgeon of any vessel is known to be somewhat liberal in the distribution of his medicines, innumerable invalids flock on board, and,

without hesitation, supplicate his attention to their real or imaginary complaints; and many urge their claims so cogently, that it requires no small amount of patience and firmness to withstand their importunity. Medical science in Soudan, and other inland countries, is also fully viewed in the same favourable light; and the white practitioner, if the assertions of travellers are to be credited, is considerately treated with kindness and hospitality. Clapperton pays an honourable tribute to its utility and value when he states, in the following passage, "that the news of our arrival spread before us, and at the different towns and villages through which we passed they brought us all the sick to be cured. Nor was it the sick alone who sought advice, but men and women of all descriptions; the former for some remedy against impotency, the latter to remove sterility. Many came for preventives against apprehended or barely possible calamities; and, in anticipation of all the imaginary ills of life, resorted to us in full confidence of our being able to ward them off."* By the population of some countries, the sources of disease are attributed to supernatural agency. In Warrée, an evil principle, designated by the term Mallaku, is supposed to live in the waters of the river, and to afflict all who have not paid a proper deference to his power by appropriate propitiations. Fowls, sheep, &c., and sometimes human beings, are immolated for this purpose.

* Journey from Kouka to Murmur, p. 23.

Fourteen miles S.E. by S. from Benin river, is the Rio Esclavos, or Slaves' river, known also in native parlance by the name of El Broder, or Brodero. It is considerably inferior to the Formosa in magnitude, but like it is obstructed by a bank of sand that debars access to any but vessels of light tonnage. Adjoining its entrance is a small town, erected on the margin of a sandy beach, and which is encompassed and partially hid from view by a profusion of palm and cocoa-nut trees. The Rio dos Forcados, or Galley Slaves' river, usually termed the river Owerree, or Warrée, is fifteen miles further to the southward. Both this and the Esclavos, from their shallow estuaries, are seldom or never frequented, unless it be by slave-ships, although in the seventeenth and eighteenth centuries the Portuguese and Dutch carried on a lucrative commerce with them, especially the latter. At the distance of three miles from the entrance is the island and town of Paloma, the latter consisting of from twenty to thirty dilapidated houses, situated on the left bank of the stream. The inhabitants transmit what little palm oil they produce to Jackree; the majority of them are now fishermen, and chiefly occupied in the curing of fish. Formerly the Portuguese had a fort, chapel, and three or four factories, in this town; but they were soon abandoned on account of the extreme insalubrity of the climate. Jerome Merolla da Sorrento, in his *Voyage to the Congo*, informs us that two Capuchin missionaries, named B. di Firenze and A. Aiaccio,

sailed from the Island of St. Thomas, in 1683, to visit the metropolitan town of Warrée, which by this route is about sixteen miles to the north-east of Paloma. They were the first persons that attempted to introduce Christianity into equatorial Africa, and, it has been stated, converted many of the natives to its doctrines. Captain Adams states that when he visited the town of Warree he observed the several emblems of the Catholic religion, with the edifice in which these missionaries were wont to perform their religious ceremonies still existed, and that "a large wooden cross, which had withstood the tooth of time, was remaining in a very perfect state in one of the angles formed by two roads intersecting each other."* Vestiges of the building and ancient reliques may still be seen; but the cross, when I visited the spot, had wholly disappeared. The people of this and the circumjacent countries were called by the ancients *Derbici Æthiopes*.

The Rio Ramos, or Bough river, is seventeen miles to the northward of that of Warrée, and the river Dodo twenty miles E. by S. from the R. Ramos. Neither of these streams are visited, except by contraband schooners for human cargoes, and to elude the vigilance of the men-of-war cruising without. Thirty miles south-east from the Dodo is the river Sengana, or Segma, at the aperture of which may be distinguished several

* Remarks on the country extending from Cape Palmas to the River Congo, &c.

isolated groups of mud habitations. The land here is very low and marshy, and the inhabitants are such a degenerate race, that they appear in physical conformation to be but a few degrees removed from the higher animals of the *Simiæ* family. None of these rivers offer any inducement for the white trader to enter them, and are alike inimical to his health and safety. An insignificant point may be noticed a few miles to the northward of the Sengana, which has been commonly, but erroneously, named Cape Formosa. It is in $4^{\circ} 31'$ N. Lat., and $5^{\circ} 41'$ E. Long. The river Sengana is the southern extremity of the Bight of Benin, and the obvious projection of the land in its vicinity may therefore be termed, with more propriety, the Cape. This Bight comprises a tract of coast of nearly three hundred and sixty miles in extent, and, excluding some parts of the Slave coast, may be merely considered as one vast and almost interminable forest swamp, whose continuity is broken by the petty rivers and creeks that meander in all directions through it. It is, without exception, the most deadly portion of the West coast of Africa.

PART II.

THE BIGHT OF BIAFRA.

THE Bight of Biafra, known by the early English writers on Africa as the Ethiopic Gulf, commences at Cape Formosa, and embraces the whole of the coast between it and Cape Lopez, situated in Lat. 36' 10" S. and 8° 40' E. Long. In physical appearance it varies but little from the usual cheerless prospect of the alluvial lowlands which here, as in other regions, are densely covered by impervious mangrove forests. A limited tract of land near the equator is, however, of a more elevated character, and includes the mountainous districts of Qua, Rumby, and Camaroons, which, with the adjacent islands of Fernando Po, Princes, and St. Thomas, are of volcanic formation. The rivers in this are more numerous and of greater size than in the preceding Bight; they generally derive their origin from the upper belt of table lands of the interior. The largest of them are much resorted to by European vessels of considerable tonnage, which export from the more fertile and cultivated inland countries immense quantities of palm oil, with ivory, and other mercantile productions. The legitimate commerce that has recently sprung up

since the suppression of the slave trade is one now annually increasing in importance, and will eventually become extremely lucrative and valuable to the commercial interests of Great Britain.

The ardent love of adventure which stimulated the Portuguese to send forth those enterprising expeditions for the discovery of unknown empires in all quarters of the globe, seems to have been conspicuously directed, towards the middle and close of the 15th century, to the east and west coasts of Africa. A reference to the history of those periods will furnish us with the records of several expeditions exclusively undertaken with the view of exploring this and the other divisions of Western Africa, then described as North and South Guinea. Even at such an early date as 1459, a very curious map, constructed by a Venetian named Fra Mauro Camaldolese, professes not only to delineate the shores of these Bights, but also the probable southern termination of the African continent, although the Cape of Good Hope was not discovered by Bartolomew Diaz till 1486, who then termed it "Cabo de todas los tormentos."* Time since then has proved very unpropitious to the supremacy of the first discoverers of these countries, since only two of their original colonial possessions in the Bight of Biafra, the islands of Princes and St. Thomas, now remain attached to the crown of Portugal.

The different tribes of people inhabiting that

* Cape of all torments.

maritime expanse of country, comprehended between the Rio Formosa, in the Bight of Benin, and the old Callebar river, have unquestionably derived their origin from one common stock. A slight and cursory investigation into their physical character, language, customs, mode of life, and other national peculiarities, would readily point out many remarkable analogies that prevail between them and their primitive progenitors, and at the same time could not fail to throw some light on the characteristics of those petty nations that populate the shores of this part of Western Africa. The great parental source from which most of them have emanated are the Ebo's of the Quorra, which, for the sake of perspicuity, it will be necessary to separate into three distinct classes.

1st. The Ebo's proper, which include the natives of the Rio Formosa, Warrée Island, Rio Escravos, Brass Town, and the Quorra generally.

2nd. The Ebo's of the table land between the Quorra and Cross river, comprising the natives of New Callebar, the Bonny, and a portion of the inhabitants of the river Andony.

3rd. The Ebo's of the country between the Andony and Old Callebar rivers, which embrace the habitans near the coast, the natives of the several towns of Old Callebar, and of the entrance of Cross river.

This arrangement, although somewhat deficient in numerical outline of the various tribes, will, nevertheless, be sufficiently comprehensive to answer our

views at present, taking into due consideration the great paucity of information that exists respecting them and their locale.

The Rio Nun, familiarly termed Brass River by the Europeans in the Bights, is also recognised by its native appellation of Quorra, or Kowara. It is situated eight miles from the Sengana, and is the first stream that engages the attention of the voyager. The entrance, near two-thirds of a mile in breadth, can only be discerned at short distances from seaward, in consequence of the flat and marshy aspect of the land in its immediate vicinage. The western point of the shore, at its junction with the ocean, has received the title of Cape Nun; and the other, or opposite one, that of Cape Filana. This river resembles most of the others in the Delta, in the dreary and monotonous features of the landscape, which are those calculated to inspire anything but a favourable impression as to either its scenery or salubrity. On both sides, for a brief space, a narrow beach of sand skirts the forest jungle, and is superseded by accumulating banks of vegetable and alluvial detritus, enveloped by numberless mangrove bushes that project to a greater or less extent beyond the water's edge. A few miles from the bar on the left shore, partially intermingled with cocoa-nut, palm, and plaintain trees, is Pilot's Town, or Cassah; while, deeper inland within the woods, is another village containing about an equal number of mud-huts of the most wretched construction. It can

only be approached by intricate by-paths, and is also entitled Cassah, or Acassah. On the eastern bank, nine or ten miles from Cape Filana, is a creek which connects this river with the St. Bento, and through which the slave-factors transmit their prohibited cargoes when the river is blockaded by any armed vessel. This creek likewise leads, by means of divergent branches, to the town of Brass, and is the ordinary route taken by the fishing canoes when passing from one river to the other. Ebo or Ebu, the long Ebo of the Bonnians, is 120 miles inland; and the confluence of the Tchadda with this river, and the Felatah town of Rabbah, are respectively 152 and 313 miles to the northward of Ebo. The people of this part of the river, owing, probably, to their intermixture with more inland nations, are of a much darker colour than those of Bonny, Qua, or Old Calabar, but in other respects closely resemble them in those national customs and other analogous peculiarities, and also in possessing the distinctive Ebo mark or totem, viz., three round black spots on each temple. The inhabitants of the Brass towns, similar to other people of Ebo derivation, are addicted to those barbarous fetish rites and superstitious beliefs that characterise the nations of the adjoining rivers in communication with them. These ceremonies, through the ministry of their Jūjumen, or priests, they render subservient to the treatment of the painful maladies to which they are liable. The most prevalent are confined to

the cutaneous tissues, and these, with morbid affections of the abdominal viscera, comprise the greater proportion of the endemic diseases of these habitable morasses. In the countries bordering the superior course of this stream, Mr. Oldfield remarks that the diseases which came under his observation were "large ulcers from the bites of mosquitoes, diarrhœa, dysentery, variola, ophthalmia, and cataract; the further we advanced into the interior, the more common we found cataract; at Rabbah I saw several hundred cases of double cataract; most of the natives were willing to undergo the operation; as we were not making a sufficient stay, it was not attempted. The natives of Rabbah, and the neighbouring towns and villages high up the river, more especially where Mahomedanism prevails, are very cleanly in their habits, performing their ablutions twice a day: there were very few cases of cutaneous diseases among them."* In those negro kingdoms on the confines of Soudan where the doctrines of Islam are inculcated, and to a certain extent have become popular, the practice of medicine is chiefly limited to the Mallams, or priests; who, like the Marabouts of Northern Africa, perform most of those surgical operations which are not of a serious nature. The term *Mo'ollam*, or *Mallam*, was, perhaps, derived originally from the Arabic word *ملي*, but, in the present instance, it is evidently a corruption of *معلم*, *mo'allim*, signifying an in-

* *London Medical and Surgical Journal*, vol. viii. p. 406.

structor or teacher. Of the indigenous products exported from this river, palm oil is the one alone estimated as worthy of the notice of the white trader. Some ivory, pepper, and dyewoods, may be occasionally obtained, but not in such quantities as to bring a sufficient remuneration for the outlay and trouble taken in procuring them. The sand bar at the mouth of the river has only two fathoms of water on it at full tides, and is therefore an obstacle to any vessel above a certain burthen. The oil carried away by the few which now frequent it seldom amounts to more than six or seven hundred tons during the year, inasmuch as the Ebo traders manage to monopolize nearly the whole produce of the inland districts to send to the Callebar and Bonny markets. This stream, though not so unhealthy as the Rio Formosa, is nevertheless one eminently deleterious to the unacclimated European. The mortality among the crews of the shipping averages at least from twenty-five to fifty per cent.

It would not come within the object of these papers to enter into any descriptive outline of the topography and natives of the many inland kingdoms that are scattered upon the banks of this river, but it may, perhaps, be requisite, in a medical point of view, to cast a retrospective glance on those naval expeditions that have been undertaken for the development of their commercial capabilities and resources. Centuries upon centuries have elapsed since this river, known as the Niger of the

ancients, first became the subject of manifold interesting and profound controversies. Herodotus, Strabo, Ptolemy, Abulfeda, Edrisi, with Leo Africanus, and a host of more modern writers, have vainly essayed to dispel the mysterious gloom in which its origin and termination were enshrouded. The number of hypothetical treatises and dissertations, the memorials of successive ages, would alone suffice to demonstrate that these points constituted a geographical problem the most difficult of solution. The exploratory researches, however, of Park, Clapperton, and the Landers, in 1831, have at length partly set at rest this famous and long disputed question.

No sooner had the discovery of the Landers been promulgated that the Rio Nun was the chief outlet of this river, and its ascent was practicable by vessels of moderate tonnage, than an expedition was immediately fitted out at Liverpool with the intention of testing how far the experiment might succeed. It consisted of two steamers, the Quorra and Alburkah, with the Columbine brig tender. These vessels crossed the bar on the 19th of October, 1832, and progressed some distance into the interior before the endemic agencies manifested their morbid effects, which commenced from the twenty-third day after their ingress. Pursuing their mercantile avocations with but indifferent success at the various country markets throughout the years 1833-34, and after penetrating as far as Rabbah on the Quorra, and Fundah on the Tchadda,

it was finally abandoned, having proved a complete failure. Out of forty-eight white persons composing their complement of Europeans, only four survived the pestilent sickness of the country; among these were M'Gregor Laird, Esq., Captain W. Allen, R.N., and Mr. Oldfield, one of the medical officers; the other, Dr. Briggs, having unhappily fallen a sacrifice to his arduous exertions. To one of the talented projectors of this enterprise, and Mr. Oldfield, we are indebted for the history of the primary effort to establish a commercial intercourse with central Africa by means of the navigation of the Quorra. The predominant maladies which conspired to create the great mortality on board were dysentery, and those adynamic remittent fevers common to the other rivers of Western Africa. The Quorra steamer having been purchased by the West African Company, reascended this river in September, 1835, and proceeded to the confluence of the Tchadda, under the charge of Mr. Becroft. During a sojourn of three months inland, two out of five men were cut off by the insalubrity of the clime, one of whom, a creole of Antigua, had been long suffering from organic disease of the lungs. In 1840, the *Ethiope*, a steam vessel expressly equipped for the coast of Africa, by Mr. Jamieson of Liverpool, and also under the command of Mr. Becroft, after surveying the Rio Formosa and determining its sources, entered the Quorra by the anastomosing branch below Ebo, and explored the

river as far as Lever, the highest point hitherto attained by any vessel. Out of twelve white individuals, the loss of life amounted to five, three men and two boys, which, considering the lengthened period of six months, may be deemed as comparatively moderate, if contrasted with the mortalities of the other expeditions. The germs of the disease and their subsequent development, are solely to be ascribed to their protracted exploration of the humid regions of Benin. The last and most unfortunate expedition, the disastrous result of which will remain fresh in the memory of most, was sent forth under the auspices of the British Government in 1841, on a scale of proportionate magnitude and liberality, with the view of forming a series of treaties with the native chiefs for the suppression of slavery. Three steamers, the *Albert*, *Soudan*, and *Wilberforce*, with the *Amelia* tender, composing this armament, passed the bar on the 13th and 15th of August, and after a very injudicious delay of several days at its entrance, steamed up the river. The remittent and other fevers of the country began to display themselves from the 4th of September, and continued from that date to gradually affect the majority of their European crews. These diseases still maintaining their alarming ravages, and even appearing rapidly to gain ground, it was ultimately thought advisable to transmit the *Wilberforce* and *Soudan* through the Delta into the ocean with the sick, and the *Albert*, shortly after reaching Egga, was compelled to fol-

low from the same pestilential causes. During the trifling period of seven weeks, almost every white person on board was prostrated by sickness. Out of 145 Europeans, no less than 130 were attacked by disease, and forty-three fell victims to fever, exclusive of casualties. The *Albert* lost on the whole twenty-six, the *Soudan* fourteen, and the *Wilberforce* thirteen men; total fifty-three. Now, as this expedition was avowedly conducted upon hygienic principles, it came, of course, under the criticisms of those medical practitioners resident in Africa, who, from their intimate knowledge of the climate and diseases of these countries, might be deemed fully authorised to express their opinions upon these subjects. Accordingly, in the outset, the selection of the most unhealthy season for the commencement of their operations, with the inefficiency of the precautionary means adopted for the preservation of the health of their crews, rendered it an easy matter for them to predicate its unsuccessful issue. It was afterwards pointed out, that in various instances the medical arrangements evidently betrayed but an imperfect acquaintance with the nature and effects of those endemic influences so fatally exemplified in the consequent sickness and mortality. The horror of malaria was carried out to such an excess, as to keep in full play Dr. Reid's "ventilating and medicating apparatus," with which each vessel was supplied, forgetting that when the men emerged from the purified compartments below, they were exposed

upon deck to the moist and tainted atmosphere of the swamps. In order to obviate this inconvenience, it was stated in the general orders, that "those who were obliged to be on deck on duty will be supplied when in unhealthy localities with respirators, and a fire is then to be kept all night in the cookhouse." Such prophylactic measures are, however, of little or no utility in the rivers of the Bights, and can only be placed on a par with the somewhat sapient plan, recommended in a work on the African colonies, of erecting a number of limekilns on the verge of the Bullom swamps, in order to decompose those miasmal vapours that might emanate therefrom to the detriment of the opposite town of Sierra Leone.

The Rio St. Bento, or St. John's river, eleven miles to the eastward of the Nun, from its insignificance, is but rarely entered. By some it has been stated to have a greater depth of water, and to afford a more direct and easy route to the town of Brass, than by the devious creeks of the former river. Brass town, the seat of government of those regions, is located upon a flat and denuded patch of ground within the recesses of the forest swamps, and barely elevated above the waters of the creek that flow past it. To Europeans its locale is almost unknown. It enjoys a population of three thousand, who are mainly dependent on their Ebo plantations for the means of subsistence. From this stream to that of the New Callebar, a distance of fifty miles, the land is merely a low and desolate

marshy jungle, heavily timbered with mangrove, and bounded on the verge of the sea by a beach of sand, the continuity of which is interrupted by the apertures of four inferior rivers. They have been denominated the Rio St. Nicholas, or Filana, R. St. Barbara, or Sempta, R. Meas, or St. Bartholomew, and the R. dos tres Irmaãos, or Sombreiro. As these titles are manifestly of Portuguese nomenclature, it is probable that either Diego Cam, in his voyage along the coast from D'Elmina to the Congo, or Fernando del Po, in his expedition to Benin, conferred such upon them.

Eight miles from the Sombreiro is Foko, or Fouché point, forming the western boundary of the Rio Real, or New Callebar river, and which has been placed by hydrographical observations in $4^{\circ} 22' 40''$ N. Lat. and $7^{\circ} 0'$ E. Long. This stream was designated by the Dutch traders as New Calbary, and by the English as the Calbarine. In the last century it was much frequented by small sloops, or shallops, that extensively traded for yams, manioc, and other farinaceous articles, then imperatively required by the larger slave-ships of Bonny and other rivers to leeward. Besides vegetable and other exports, it yielded at periods no inconsiderable number of slaves, brought from the Hackbous or Ebo country. The attention of the inhabitants is now directed to the culture of the palm tree, and the vending of its produce, with which they load annually several ships.

The village of Foko, or Fouché, originally named

by the Hollanders Wyndorp (from the abundance of palm wine, or Tumbo, procurable from its natives), consists of a number of scattered houses, indiscriminately erected around the point. It is inhabited by the river pilots and their families, who are mostly engaged in piscatory pursuits, in which they are very expert. The aggregate amount of people is above three hundred. A deep and conspicuous indentation of the coast, three miles to the westward of this point, is termed Fouché Gap. A few native huts may be observed amid the ever-green brushwood that skirts its limits. Fouché village and point are decidedly the most healthy localities in New Calabar, from their favourable exposure to the daily sea breezes, and exemption from mudbanks, with their natural concomitants, mosquitoes and sandflies. The soil in the neighbourhood of the houses is a thin layer of sand upon a bed of alluvial deposits. The sandy shore in front of these habitations may be said to continue to the mouth of a narrow creek that obliquely winds behind the town towards the Gap, where it has been supposed to join the ocean.

Six or seven miles beyond Fouché point is Youngtown, scarce worthy the name applied to it. It possesses about eight hundred inhabitants, the majority of whom are the slaves of a petty chief. Some tall and graceful cocoa-nut trees, with an occasional palm and banana, are the only objects that serve to dissipate the pervading monotony of mud and mangroves meeting the eye on all sides.

A short distance to the northward of this creek is the entrance of another that leads to the Quorra, and through which the Bonny canoes pass when they attend the Ebo markets. The upper projection of the bank at its mouth is called Juju Point; abreast of it the merchant vessels commonly anchor. Following a circuitous course for some miles to the northwest, it unites with the one that passes by the chief town of New Callebar, five miles more to the north. This latter creek, after effecting a junction with that just mentioned, conjointly with it tends towards the Brass country, thus constituting an island, on the right bank of which, in proximity to the river, the metropolis of this kingdom is situated. The plan of the town, its architectural construction, with the customs of its inhabitants, are precisely the same as those of Bonny, the description of which will in general suffice for this and the other towns of Callebar. The population approaches to near eight thousand, who are descended from the great Ebo tribes of the interior. Their diseases resemble those of the other maritime districts of the Delta. In the centre of this collection of native edifices, and facing the king's residence, is a reservoir, or pond of fresh water, in the rainy months plentifully supplied with a fluid of a tolerable quality. In the dry season, from the demands of the populace, and the incessant evaporation from its surface, it becomes encrusted with a scum of animal and vegetable exuviae, which emits a disagreeable nauseous odour. In this state it is

extremely unwholesome to Europeans, who are very apt to drink it, in consequence of the scarcity of pure water, which can only be obtained for the use of the shipping from the distant inland creeks.

At Youngtown, the river is from two to three miles in width, but opposite the Callebar creek diminishes to less than two, and, in proportion as it recedes from the sea, gradually contracts in size, and finally terminates in a number of subsidiary branches. The eastern bank of the stream is the boundary of an uninhabited morass that descends within three miles of Fouché, where it suddenly turns to the eastward, forming the intervening tract of land between it and the Bonny river. On both sides of the stream the swamps are so low as to permit a regular inundation of the tide, whose ebb exposes to the action of a torrid sun extensive shelves of alluvial and clayey mud that engender myriads of winged pests so annoying to the white residents at the anchorage. The voracious ground-shark (*Zygæna vulgaris*?) infests the lower part of the river, and is held by the natives as sacred. Its destruction, therefore, is punishable with severe penalties. The insalubrity of these localities is well known and appreciated in the Bights, from the fearful sacrifice of human life that has occurred in them.

The Bonny, or Bani, was one of the first rivers which the Dutch, English, and Portuguese, were acquainted with in this portion of Africa. From

the commencement of the sixteenth to the present century, it was the favourite mart of the slave-ships, when the exportation of human beings was a legalized traffic, and the amount of slaves transhipped seldom came to less than 16,000 per annum. Since the extinction of this odious commerce, it ranks as the grand emporium of the palm oil trade, exporting many thousand tons of this lucrative commodity, and employing more vessels than all the rivers of the Bights collectively. The southern extremity of the shore, at its embouchure, has received the title of Rough Corner, in the old charts that of Bandy Point, and is eight miles to the eastward of Fouché; both this and the New Callebar river having one common estuary. Between these two promontories is a small islet, three-quarters of a mile from Rough Corner, called Breaker Island, formed by the confluence of the tides of both streams, and scantily clothed with clusters of dwarf brushwood. The outer channel leading to this isle is rather intricate, and the navigation of it attended with numerous difficulties, owing to the position of certain sandbanks, particularly the Baleur, Spit, and Portuguese shoals, on which in heavy weather the snowy crests of a mountainous sea break with tremendous force and turbulence. A mile from Rough Corner, on the right bank of a petty rivulet, masked from view by a compact array of young mangrove shoots, is Jujutown, the abode of the pilot-fishermen, and the principal priests, or Jujumen. It

contains about four thousand inhabitants, who are engaged in trading for palm oil and in fishing; the products of the latter occupation being invariably dried, cured, and sent into the interior, where they are much valued. The soil of this district is a yellow siliceous glomerate, slightly elevated above the river, and covered in different places by a rich dark loam, on which the *Gramineæ*, *Cyperaceæ*, *Leguminosæ*, and *Melastomaceæ*, riot in all the gay luxuriance of a tropical verdure, overshadowed by the deeper-tinted foliage of several magnificent trees.

The town in its structural outline bears a close affinity to Bonny; with this distinction, however, that its site is a composition of mould, sand, and shells, in place of accumulations of filth and vegetable refuse. In the environs of Jujutown, the prospect is also far more pleasing and diversified. Fresh water of an inferior quality may be procured from a small spring adjoining some native edifices, termed the Barracoons, in prior years used for the reception and accommodation of purchased slaves. Like other negro tribes in Western Africa, they have preserved some faint vestiges of a past history, and refer with pride to an ancient tradition, that the land on which their town was founded was formerly a floating island, brought by the waves from a distant continent to the spot where it is now fixed. From a few aborigines which existed thereon at the time of its separation, they deduce their primary origin. No credence can, however,

be attached to such vague and legendary reports, inasmuch as the physical conformation of the skin and other peculiarities are plainly indicative of an Ebo descent.

From Rough Corner, a firm sloping and sandy shore, skirted by thickets of stunted underwood, is prolonged three miles up the river to the outlet of a creek communicating with the river Andony. Half a mile to the southward of this creek is the usual landing to Bonny, from which the path to the town passes down the bed of a stream, dry at low water, but over which Europeans have to be carried, in consequence of its answering the purposes of an ordinary sewer for the inhabitants. It abruptly terminates in a *cul de sac* on the borders of the suburban tenements, that are hid from the shipping by mangrove and two or three gigantic cotton trees, whose lofty and umbrageous foliage may be considered as one of the most prominent attractions throughout the tame and wearisome scenery of the circumjacent swamps. From the projecting limit of the beach at the Andony creek to the landing place of the town, the respective cask-houses of the trading vessels are strewn along the margin of the strand. At the point just alluded to, the criminals of the country are executed, and their mutilated bodies thrown to the ground-sharks, which swarm in multitudes around the place.

Bonny, or Great Bandy town, as it was sometimes named, is built on the southern bank of the

Andony creek, on the verge of an extensive morass. It occupies a large space of ground, from the irregular erection of the houses, which evince a barbarous and rude taste in their construction, with a perfect indifference as to either cleanliness or comfort. The framework is composed of mangrove sticks, interlaced together by pliable withes, and smeared over with a cement of clay and sand, indurated in the sun, so as to be perfectly durable. These huts are subdivided into four or more apartments, according to the rank of their inhabitants, and are destitute of any ornamental embellishment, most of them being without windows for the transmission of light or ventilation. They are, doubtless, more for ostentation than use. The roofs are composed of the branches and matted leaves of one of the sago palms, but are so inefficiently united, as to furnish little or no protection from the rains, and it is not an uncommon event to see the whole fabric dismantled by the heavy puffs of a tornado. The streets are the narrow and confined footpaths between the houses, so intricate and tortuous as to perplex all unacquainted with their destination. During the periodical rains they are nearly submerged, and almost impassable from semi-liquid mud and pools of stagnant water.

As the fenny districts contiguous to Bonny are unfit for cultivation, the inhabitants in general purchase their food from the Ebo countries, or produce it in moderate quantities upon their upland farms. It comprises yams, plaintains, sweet

potatoes, maize, bananas, with poultry, sheep, bullocks, and dry and fresh fish, &c., their culinary preparation of which is remarkably plain and simple. Provisions are scarce, and, if required for the shipping, can only be bought at an exorbitant rate, and frequently their deficiency is so great, that they cannot be obtained at any price. To compensate for these drawbacks, the river is bountifully supplied with several species of mullet and other fish, while in the dry season turtle resort to Breaker Isle, and the opposite shore, to deposit their eggs, and can be readily captured. Water of a dirty colour, and somewhat brackish, may be obtained in the village of Little Bonny, but the inhabitants seldom drink it, preferring the palm wine, or Tumbo, for their daily beverage, although it is acid and of an unpleasant flavour. The plants and trees observed within the precincts of the town are limited in variety, and comprehend many of those previously mentioned. In addition to them may be usually distinguished the *Bombax pentandrum*,¹ *Cucurbita lagenaria*,² *Capsicum frutescens*,³ *Carica papaya*,⁴ *Jatropha Curcas*,⁵ *Cucurbita pepo*,⁶ *Wedelia Africana*, *Cocos nucifera*, &c., with other species belonging to the *Solanæ*, *Cucurbitaceæ*, and *Compositæ*. The anomalous distribution of plants on this coast

¹ Silk cotton tree. Probably this is the tree that Herodotus alludes to when he says, "and there are also found those trees of the forest which, instead of fruit, bear wool (cotton) superior both in beauty and goodness to that of sheep. It is from these trees the Indians obtain their clothing."—Sect. vi. lib. 3. ² Gourd plant. ³ Bird pepper. ⁴ Papaw tree. ⁵ Physic-nut tree. ⁶ Pumpkin.

is a subject deserving of much consideration, since many edible vegetables, abundant in one country, are not to be found in others. The *Oryza sativa* (common rice), may be adduced as an example in illustration. This nutritious grain, indigenous to the Gold and Windward coasts and most of the kingdoms of central Africa, grows, in this and the other streams of the Bight of Biafra, neither in a cultivated nor wild state, and is only known to the natives from its introduction and importation by Europeans.

The *Varanus Niloticus* (commonly called African Iguana) is regarded by the Bonnians with a superstitious veneration, from the supposition that it is endowed with medicinal and other mysterious powers; and, being under the sacred protection of the priests, any wanton injury to it would be a sure prelude to a rigorous punishment, if not death. The customs of the people of Bonny and New Callebar in these respects somewhat resemble those obsolete pagan rites of animal worship practised by the ancient Egyptians; but their adoration of them as tutelary deities, as has been asserted, is both erroneous and absurd, their preservation being only tolerated from an imaginary idea that they exert some specific influence in the maintenance of the prosperity of their towns.

From the tardy and protracted mercantile intercourse maintained with the neighbouring countries, the number of the inhabitants of Bonny must necessarily fluctuate; they may, however, be stated

to average from 12,000 to 15,000, and derive their origin from those Ebo's inhabiting a range of table-lands, about forty miles up the Rio Andony. It has been called short Ebo, in contradistinction to that of the Quorra, which occupies from ten to fourteen days' journey ere it is attained. The Andony creek trends for twelve or fourteen miles to the eastward, and, after intersecting a flat and bushy-wooded country, unites with the river of the same name. The tract of land on which Bonny is built, thus isolated from the main, was in former years termed Bandy Island. The village of Little Bonny is a quarter of a mile from the eastern suburbs, and appears to be an irregular prolongation of the larger town. Five miles up this creek are the hamlets of Appellima and Minima, located on two gentle slopes, and half enveloped in the sombre foliage of the adjacent forest. They are the country residences of the king and his chiefs, who resort to them more for the gratification of their natural indolence, than a relaxation from any laborious avocations. The houses are of much neater construction in these places than in the other towns of the river, their framework being composed of European planking, with floors of the same material. They also present a more decorated and improved appearance within.

On the outskirts of Minima may be observed one or two specimens of the *Hybiscus Abelmoschus* (musk-ochro). They are not indigenous to the place, having been transplanted from the interior. Though

the *Hybiscus* tribe flourish in rich profusion in nearly all the tropical regions of Western Africa, the above species is the one least common and least known. Of the plant, the seeds, from their odoriferous musky fragrance, are the parts most highly prized, and, when obtainable, usually selected to form one of the ingredients that enter into the composition of the Ebo amulets, or medicinal prophylactics. By the natives of Soudan they are also sometimes administered in dyspepsia and other gastric derangements, as a carminative and stomachic. The Arabs, by whom it is named ابال موش *Ab-el-Mosch*, and some of the pastoral hordes of Northern Africa, bruise and mix the seeds with their coffee, which thus becomes impregnated with their aromatic virtues.

The *Hybiscus esculentus*, or West India ochro, termed in Bornou, *Meloheia*, and in Darfour and Arabia, باميه *Baméa* is the species generally cultivated for domestic purposes. It is one of the most wholesome edibles used by the Africans, and is a favourite constituent of their dishes, being eaten in conjunction with palm oil, pepper, and other vegetables. Its bland and mucilaginous properties strongly recommend it as an article of food to those Europeans who intend to reside for any length of time in these unhealthy localities. The Henna plant *Lawsonia inermis*, familiarly known in Soudan by the name of حنه or تمر حنه *Tamra-henné*, is occasionally brought from the markets of the interior by the native traders for sale, and may be

met with at intervals in the harems of the chiefs. The inland districts beyond these points are as yet a *terrâ incognitâ*; the jealousy and illiberality of the natives offering an effectual barrier to their exploration.

The northern shore of Bonny river is chiefly composed of tidal accumulations of sand, interspersed with mud banks and channels. It is termed *Telafare*, or Peter Fortis's land, and is the reflected continuation of the eastern bank of the New *Callebar* river. There are two or three small towns erected on clearances adjoining the water's edge, and entitled by similar appellations as the districts in which they are situated. The stream at this part is nearly two miles broad, but proportionately contracts as it majestically sweeps to the northward, both banks being fringed with gloomy and impenetrable woods, with a few stray villages and sinuous creeks to break its unvarying uniformity. The branch which passes from the *Quorra* above *Ebo*, dry in the fine months, has been stated to be its termination; we have, however, no authentic information to vouch for the correctness of this report.

A comparison between the uncivilized and savage tribes of Western Africa, and the Semitic races, with their affiliated offshoots, cannot fail in pointing out the prominent similarity that prevails in the manners and customs of both. In none of the negro nations are there traces of a participation in the usages of an oriental source more obviously

marked than in the migratory tribes of the Joloffs and Mandingoes, the predatory Fellatahs, and the prædial Ebo's of the Delta.

A superficial acquaintance with their remote and modern history will furnish us with rational grounds for the assumption of this belief, that the habits of the former races were superadditions progressively engrafted upon those of the latter, owing to the promiscuous intercourse carried on with the north-eastern Mahometan kingdoms, but previous to their assimilation changed and vitiated by time and distance. The populations of this and the other rivers in the Bight seem to be partially imbued with the doctrines of Zoroaster, in so far as recognizing two distinct immortal principles—one good, and the other evil—of the nature of which, however, they have but an indefinite and confused notion. The attributes of the first are regarded as of an innocuous and beneficent import; the second, denominated in many parts of Africa as the “evil eye,” is feared as a capricious and malevolent spirit, invested with unbounded power for the procreation and infliction of diseases, and requiring to be pacified by continual oblations in order to avert the morbid effects of his displeasure. By the Ebo's, especially, this principle is greatly dreaded as the cause of all abscesses, glandular enlargements, phagedenic ulcerations, to which the females are so susceptible, and those distempers that afflict them or their flocks. Nor is this dread restricted to these regions alone; for

this evil influence, under various modifications, is acknowledged in almost every country in inter-tropical Africa, and is universally considered in the same unfavourable view. Mr. Bowditch, in his interesting *Mission to Ashantee*, remarks, in reference to this subject, that "the power of fascination by the eyes is believed and dreaded in those parts of Africa (interior) as mortal, whether exercised by the fetishmen as priests, or the coorumpun against animals. The idea prevailed in Pliny's time, but it was ascribed to the voice. "In libro quodam Plinii naturalis historiæ legi esse quasdam in terrâ Africâ familias hominum voce atque lingua effascinantium. Qui si impensius fortè laudaverint pulchras arbores, segetes lætiores, infantes ameniores, egregios equos, pecudes pastu atque cultu, optimas emoriantur repentè hæc omnia."*

The diseases peculiar to the inhabitants of Bonny and New Calabar are those that proceed from a humid and paludal situation, and are represented by a similar train of morbid phenomena that characterise those of Benin and the Nun. Like them, the most aggravated forms run a speedy course, and are invariably followed by fatal results, from the absence of any appropriate plan of treatment. Charms and medicine-bags fabricated by the Ebo dibia or doctors, and held in the hand, or worn attached to the neck by copper wire, are the means relied upon as preventives against both sickness

* Page 336.

and danger. In those districts of the Ebo country adjoining the river Andony, native practitioners are divided into two communities, male and female, both of whom are well known by the separate appellations of *dibia woca* and *dibia wy*.^{*} The latter class are chiefly composed of women somewhat advanced in age, who solely perform the operation in the rite of female circumcision. They are also the vendors of multitudinous specifics for the removal of those morbid affections incidental to the younger portion of their sex. In Bonny the native title conferred on surgeons of vessels is *Breabo*. Lepra, scabies, and other diseases of the common integument, are usually confined to the lower classes of slaves, from their neglect of the necessary ablution of the body, careless and uncleanly habits, and undue exposure to the vicissitudes of the climate. When such are allowed to assume a chronic form, they become very intractable, and often resist the most vigorous remedies. Instances of a deficient or abnormal organization of the cutaneous textures are seen in the male and female Albinos, several of whom may be met with in the different villages. In the other rivers they are comparatively rare, and it has been asserted

^{*} *Dibia* signifying doctor, and *woca* man, *wy* is the common expression for woman. Among the native tribes in the various countries of West Africa, the terms employed to denote the 'medical practitioners are the following:—*Lock-a-Mallaku*, Benin; *Gangar* or *Gangam*, Kongo; *Maïmahgané*, Haussa; *Ebbebok*, Old Calabar; *Jarrahlah*, Mandingo; *Enishogung* or *Ologung*, Yarruba; *Dey-yo*, Kroo, &c.

that in some parts they are put to death soon after birth.

Pneumonia, catarrhs, and other pulmonic affections, are extremely prevalent in the cold rainy months, their invasion being, in all probability, connected with the greater volume of blood which is then thrown into the deeper-seated organs and cavities from the languid and depressed action of the capillary circulation. Cerebral maladies are seldom of a serious nature, unless emanating from mechanical injuries. In congestion of the vessels of the brain or its membranes, accompanied by much febrile excitement, relief is experienced from the native process of cupping, which consists in making three parallel longitudinal or horizontal incisions on either temple, from ten lines to an inch in length, and about eight lines apart. These incisions are performed by a sharp razor, or knife, and a small calabash is then applied, the air being then exhausted by burning paper or cotton *secundum artem*. After the abstraction of a few ounces of blood, the wounds are dressed with a black carbonaceous matter, manufactured from the oil lamps. The employment of this substance leaves a dark indelible stain behind, which, as the individual advances in age, is never wholly obliterated, although its removal is occasionally attempted. This mode of cupping is one constantly adopted by the natives in the Bights, in all painful affections of the head. Variola, fortunately, is not of regular occurrence, since its visitations are of a

very pestilential character. In Ebo, the people, from the malicious statements of the Bonnians, imagine that European surgeons enjoy the faculty of generating this devastating epidemic by placing a germinating dust in the palm of the hand, and diffusing it by the breath throughout the surrounding atmosphere. My friend Mr. King, of the *Ethiope* steamer, has informed me that this singular opinion exists in several of the towns of Cross river, and that his appearance was the signal for the quick dispersion of their inhabitants.

Dysentery and other enteritic complaints are prevalent in all seasons, but more particularly at the commencement and close of the wet. Numbers fall victims to their malignant severity, without respect to either age, sex, or occupation. Rheumatic and other fugitive pains prevail here, as in temperate climes, from unsettled states of the weather, and are treated by repeated ablutions of warm water. Where the pain is more fixed and circumscribed, a series of deep scarifications are made over the part, which is then assiduously bathed with hot fomentations to promote the free oozing of the blood, and these applications are persevered in till the requisite impression be obtained. The propriety of this mode of vascular depletion for the alleviation of human suffering, is one clearly suggested by an all-provident nature, and forcibly inculcated in the majority of the African tribes by the dictates of an imperious necessity, as

a remedial equivalent producing all the good effects of the more scientific resources of civilized nations.

Hernia, both congenital and acquired, may be occasionally seen in those slaves who are of a lax muscular fibre, or who have been subjected to heavy toil. Exomphalos, or umbilical hernia, is rather viewed in an ornamental light, and some people, under this idea, allow the intestines to protrude to a considerable extent. Gonorrhœa, syphilis, and other genito-urinary disorders, display their numerical superiority here as elsewhere in these regions. Calculous diseases are apparently unknown. The Ebo's, from an hereditary predisposition to melancholy and despondency, are affected with the malady which Dr. Winterbottom has termed lethargus, or sleepy sickness, a disease that possibly originates from an impaired condition of the cerebral apparatus, and which has been thought to be one of the sequences of the deranged organic functions of the skin. Cases of this peculiar affection are very uncommon, two or three only having come under my observation during some years' residence in this part of Africa.

In phlegmonous and other tumours, or in local turgescence of the capillary vessels, where any tendency to suppuration exists, and in which topical bleeding is not required, the green pods of the *Capsicum frutescens*, pounded into a pulp, are applied to the part, the acridity of its essential oil acting as a powerful counter-irritant. On

several occasions in which I have seen this pungent pepper employed, it could not otherwise but have augmented the painful sensations of the patients; they have, nevertheless, borne its infliction with the most philosophic fortitude. On some of the domestic slaves brought from the inland districts, a curious operation is practised when in infancy, and previous to their transmission for sale. It consists in the dissection or corrosion of the cuticle covering the forehead from its subjacent textures, which leaves a large unpleasant cicatrix as the person progresses in years. Natives so disfigured have been designated by the title of *Eché*, the result of this partial cuticular denudation being considered as a popular mark of distinction in those countries in which its performance is inculcated. Polygamy, in conformity with the usages of African life, is fully tolerated in all classes; the number of wives each individual may possess varying in proportion to his wealth and position in society. The females are not so prolific as those of the kingdoms of Soudan, and rarely give birth to more than two or three children, if so many. Should, however, any woman at her accouchement be unfortunately delivered of twins, both the mother and her offspring are condemned to immediate destruction, inasmuch as the affair is viewed in the light of a public degradation, the Jujumen asserting that, under such circumstances, it places the woman upon a disgraceful equality with the brute creation. The wife, provided she

is a favourite, not unfrequently escapes with life, but the children are never suffered to exist. This barbarous custom is also adopted by the Ebo's of the Quorra and Andony, and by the people of Guiana, in South America. It is likewise upheld in some of the towns of Benin, according to the statements of Bosman, who relates that "in all parts of the Benin territories twin births are esteemed good omens, except at Arebo (Reggio), where they are of the contrary opinion, and treat the twin-bearing women very barbarously, for they actually kill both women and children, and sacrifice them to a certain devil."* Parturition in the negro female has been generally represented to be an easy process, and not attended with much danger; such, however, is not invariably the case. Inquiries among the different tribes have amply satisfied me, that in many instances the parturient woman has perished from want of a little timely assistance in those complex and preternatural labours which have hitherto been supposed to be of less frequency among them than in the females of more civilized communities. Puberty in these regions commences about the age of eleven or twelve years, and sometimes much earlier.

Women, during the continuance of the catamenia, are deemed unclean, and are not permitted to touch or go near any object in use. Most of them, when in this state, retire from public life, and are usually immured in a solitary apartment,

* *Description of the Coast of Guinea*, p. 425.

until the cessation of the discharge, and the subsequent purification, allows of their liberation; all sexual intercourse in the interim being firmly prohibited. In the interior it is a well-known fashion for the females to paint themselves in glaring colours, in order to denote the existence of this periodical secretion, and at the same time to warn strangers from being in any degree contaminated by their propinquity. It is well worthy of remark, that several of these ordinances are precisely in accordance with those Mosaic laws laid down in the book of Leviticus,* which strictly enjoin many wise and salutary precautions relative to this subject. Females of all ranks are accustomed to besmear different parts of the skin with the powder of a species of redwood tree, triturated with palm oil. This pigment has been thought to correct the fœtor of the perspiration, and also to enjoy certain prophylactic influences. Not a few, however, adorn themselves with it, to heighten the effect of their charms. In Katunga, Rabbah, Boussa, and other towns in central Africa, it is also used for similar purposes. Clapperton says, that it is brought from Benin, "pounded into a powder, and made into a paste; women and children are rubbed with this, mixed with a little grease, every morning; and very frequently a woman is to be seen with a large score of it on her face, arms, or some part of the body, as a cure for

* Chap. xv. &c.

some imaginary pain or other."* Circumcision is performed on both male and female; the consummation of this rite, however, in the latter sex, is not of such general prevalency as in Ebo and Old Callebar.

The Rio Bonny has been justly considered to be the least insalubrious river of this Bight, and not so inimical to European constitutions as the others, owing, doubtless, to the merchant vessels lying but a few miles from its mouth. The wide and open expanse of the stream, its near proximity to the ocean, with the sanative effects of a more protracted sea breeze, contribute, however, to render it less fruitful in those deleterious agencies that predominate in the other maritime localities of tropical Africa. The deaths among the white crews who reside in this place seldom exceed twenty-five per cent., and in the healthy season it often occurs that they do not lose a single hand out of a large complement of men. All vessels, when they enter these rivers for any length of time, are housed over with mats, made from a species of palm, which, although not waterproof, serves as a temporary protection from the rays of a fervid sun, and the inclemencies of the weather. The natives of this river, in their physical conformation, resemble the Ebo's of the inland districts, especially in their pale yellow skin, and its smooth delicate organization. They are of less

* *Journal of Second Expedition into Interior of Africa*, p. 136.

stature, thinner, and of more symmetrical proportions, without that tendency to corpulency manifested by other tribes of a similar progenital derivation. Notwithstanding the intimate commercial connection which has prevailed between them and the white traders, but slight progress has been effected in the amelioration of their wretched habits, nor has there been any inclination towards the adoption of the more intelligent and refined customs of Europeans. A glance at the class of men who figure as the representatives of civilized society would not render the explanation difficult. Treacherous, vindictive, of fierce and brutal passions, with a host of degrading vices peculiar to the lowest negro tribes, there are, perhaps, but few people in Western Africa who bear a more disreputable and odious character. Like the inhabitants of New Callebar, they are professed cannibals, and, with many disgusting and superstitious ceremonies, eat the flesh of their prisoners of war, after putting them to death with the most callous indifference. By the ancients, the inhabitants of this part of the coast were named *Xyliuces Ethiopes*. The currency of the country is a small copper bar, in the shape of a horse-shoe, and termed a *manilla*.

Fifteen miles to the eastward of Rough Corner is the Rio Dony, or St. Domingo, now known as the river Andony. Its narrow and contracted entrance, blocked up by a shallow bar of sand, is alone an obstacle to the admission of trading

vessels, and the little commerce it carried on formerly was monopolised by slavers. This stream leads to the short Ebo, previously alluded to, and also to the countries of the Mocoës and Quas, in the latter of which the customs and language of the natives are almost identical with those of Old Calabar. There are two or three insignificant villages a few miles inland on the margin of the eastern bank.*

The coast from this river inclines to the eastward for sixty miles, to the estuary of the Old

* Few individuals are aware of the fact that an inland communication by water may be established between the Rio Andony and the Rio Volta, without the necessity of undertaking a sea voyage. The route per canoe may be described as follows :—

1. From the Rio Andony to the River Bonny, by the communicating creek that passes to the eastward of the town of Bonny.

2. From the Rio Bonny to New Calabar, over the flats, within the estuary of the two streams.

3. From the New Calabar river to the Quorra, by the creek below the town, which subsequently separates into two divergent branches, one leading to the town of Brass, and the other passing more to the eastward, and entering the Quorra some distance from its embouchure.

4. From the Quorra, or Rio Nun, to the Rio Formosa, either by the River Broadway, below Ebo, or by the numerous petty creeks connected with the Rio Escravos and other streams, all of which communicate more or less with the Benin.

5. From the Formosa, or Benin river, to the town of Lagos, by what is termed the Lagos creek, situated a few miles above the English factories, (passing to E. Lagos river and the Cradoo lake), and through which the slaves purchased in the Quorra usually pass to more maritime depôts on the northern shores of the Bight.

6. From Lagos, through West Lagos river, by Badagry, to Whydah and Grand Popo.

7. From Grand Popo, by the creek and salt water lake, past the fort of Quitta, to the town of Aoonah, and from thence to the Rio Volta.

Callebar river; it is low, thickly wooded, and unattractive, and is thinly populated by a wild and savage race, who have been denominated Funimen. The Rio Calbarine, or Old Callebar, is a large and noble stream, about ten miles broad at its junction with the sea. Its earliest frequenters were the Dutch, who gave it the title of Oude Calburgh, but who soon ceased to visit it in consequence of the extreme unhealthiness of the anchorage near the towns. Two peninsular projections, termed Tom Shots and Backassey, or East Head, mark the respective terminal boundaries of the land on either side. The first, or western point, is in Lat. $4^{\circ} 36'$ N. and Long. $8^{\circ} 19'$ E. Effeat, or Tom Shots town, is a dirty and unimportant village, erected within a curve of the beach, and encompassed by mangrove woods, which conceal it from view. Its inhabitants possess extensive fisheries, of which the chief products, a species of *Silurus*, are smoked and cured in immense quantities for the remote markets of the interior. For forty miles this river presents one broad and continuous stream, until it arrives at an insular swamp, called Parrot Isle, where it separates into two navigable branches; the left, or largest one, named Cross River, flows for several hundred miles through a beautiful and fertile country, which has only recently been explored through the indefatigable exertions of Mr. Becroft. The second, or eastern branch, runs a brief course of forty or fifty miles, and abruptly terminates in a

petty creek. On it are located those mercantile towns to which European traders resort.

After passing Tom Shots Town, the western bank of this river becomes more elevated. The strand here is formed of the friable particles disintegrated from a series of low sandstone cliffs, which are more or less hid from view by a foliaceous screen of young woodshoots. The higher portion of the land adjacent to Parrot's Isle has received the appellation of Tobacco Head, from a species of the *Nicotianum* having been discovered in a wild state growing thereon. The opposite, or Backassey shore, is a vast densely wooded and swampy flat, intersected by four tributary streams that empty their water into the main trunk, viz. Backassey, Little Backassey, Little Qua, and Qua Rivers. The last of these, which is the one of the greatest magnitude, and most accessible, takes its source from the uplands north-east of River Town, where its banks, before entering the Delta, are diversified by native farms and cultivated plantations, to which the affluent inhabitants of Old Callebar retire for the restoration of their health in cases of sickness. One point connected with the medical topography of these regions is deserving of consideration. From the aperture of Qua River down to East Head, and for some leagues beyond the outer bar, the soundings are indicated by black, viscid, and alluvial mud, which projects over more than a third of the bed of the stream; the other two-thirds, as far as Tom Shots

Point, being composed of banks and patches of straw-coloured sand. This, similar to most of the embouchures of the rivers in the Bights, is not embellished by any picturesque or pleasing scenery; and the only signs of human habitations are a few dusky fishing villages, built on the verge of the forest, the abject and destitute condition of the natives of which are precisely the counterpart of their wretched domiciles. This river has been stated to be one of the radiating branches of the Quorra; this is, however, an error, since it has not the slightest communication with it.

Fishtown is an obscure village, populated by fishermen, and erected upon a headland six or seven miles above Qua River, on the same side. This promontory has been distinguished by the name of Fishtown Point, and is one of the principal guides for the navigation of the shipping. In the centre of the river, nearly facing it, and about a mile distant, is Parrot Island, attired in the sombre livery of the *Rhizophoræ*, and, as its title implies, the haunt of the *Psittacus erythacus* (grey parrot), who congregate in immense flocks within its recesses to roost or rear their young.

From Parrot Isle the river gradually diverges for ten or twelve miles more to the eastward, having on either side an insular swamp detached from the main land, that on the right being denominated James's, and that on the left Alligator Island. A sandy shore on the inner part of the latter is the favourite resort of numerous alli-

gators; hence its appellation. The morass here is intersected by several unimportant streams, at the mouths of which and along the wooded banks are extensive shoals of alluvial mud. A little above Alligator Island is a large creek (Seven-fathom Creek), and nearly abreast of it on the opposite side is a conspicuous projection, termed Seven-fathom Point. From this point the river expands into a noble and spacious reach, tending for seven or eight miles to the northward, until checked by the elevated uplands of Old-town.

The early history of Old Calabar, like most of the other inhabited regions of Western Africa, is involved in much obscurity. Among the natives little is known concerning the primary colonization of their river, and all the information I could glean upon this subject was, that their ancestors, many centuries since, had emigrated from a distant country up Cross river. This statement is the one, perhaps, most in accordance with those views which maintain, that the tide of population had radiated first from Ebo, on the Quorra; and such appears to be borne out by several curious peculiarities which exist in common with them, both in their physical structure and customs.

The town, which all the natives concur in asserting to be of the most ancient date, was, as the name implies, Old-town, which is now but scantily populated. For several centuries this place continued to be the metropolis and principal trading depôt for merchantmen and slave ships. About

three hundred years ago, many of its inhabitants, from the harsh and cruel treatment of their rulers, emigrated to a sandy district within a creek, five miles distant, and there founded Creek-town. Again, as this town increased in magnitude and prosperity, so did its government become the more arbitrary, and from similar causes as the preceding, a troop of emigrants passed from it, and having purchased a piece of land from the petty chief of Qua-town, settled down there and erected River-town, or Attarpah, which from its eligible site, proximity to the ocean, and other local advantages, gradually arose under the judicious control of several able chiefs, to occupy that superiority, which its rivals had originally enjoyed; and, with the exception of Creek-town, has now the supreme government over all the towns and villages in its immediate vicinage.*

In proportion as the stream becomes less impregnated with the saline particles of the tidal influx, the banks, though marshy, and below the level of high water, assume a more lively and variegated aspect. Arborescent shrubs projecting over the water are indiscriminately blended with a profusion of oil palms, cocoa-nut, and other graceful trees belonging to the *Palmæ*, whose pinnated branches waving above the ocean of evergreen foliage, offer a more delightful contrast to the dark

* For more general details respecting the government, customs, and other peculiar traits of these natives, vide *Jameson's Edinburgh Philosophical Transactions*, vol. xl. p. 313.

and lugubrious scenery below. On the eastern bank, about five miles from Seven-fathom Point, the mangrove woods stretch to the village of Henshaw-town, where the land suddenly rises. This place consists of little more than a dozen houses, erected on sandy patches divested of their dense herbage. The population is near two hundred, mostly dependent on the chief from which the village derives its title. A long and narrow path leads to the river, fringed on both sides with the forest brushwood, and on its lower slopes by a sward of thick grass, amid which are the graves of a few Europeans. Adjoining the landing-place of this hamlet is the outlet of a spring of fresh water, from which the shipping is supplied. It is not an easy matter to discover this watering-place, on account of the tangled thickets that encompass it. From this spot a somewhat precipitous and closely wooded eminence, about two hundred feet in altitude, encroaches on the river, and constitutes the southern limit of the Old Calabar town. Attarpah, or River-town, the metropolis of these regions, is pleasantly located upon an easy acclivity within a semi-circular amphitheatre facing the river, having a back-ground formed of verdant woodlands of a moderate height. The town is chiefly built on an inferior slope, the houses being clustered together in irregular groups that approximate close to the beach. The streets in their outline are similar to those of the other African towns previously adverted to, and are merely tortuous

and intricate bye-paths, rendered difficult to thread from the mud walls and foliaceous fences of the adjacent domiciles effectually concealing all objects but the arid sand with which they are strewn. Near the palace of the king and the market areas, they are of much greater width, and are diversified with a vegetation of quite a tropical character. The houses of Old Calabar are far superior in their construction to those of any other nation in the Bights. They comprise a series of equilateral or oblong courts, half roofed over, and occupying a considerable extent of ground. The building materials are the same as those used elsewhere, the floors being a composition of hardened sand. The most remarkable architectural structures, however, that attract the attention of the stranger, are the massive wooden mansions of the king and chiefs. These edifices were originally built in Liverpool and Clarence, transhipped from thence in detached pieces, and reconstructed there under the superintendence of European carpenters. Their sides are formed of stout planks overlaying each other so as to facilitate the passing off the rain. The habitable rooms are on the upper story, and are well lighted either by glass windows or latticed apertures, which have in front of them an open corridor that surrounds the entire building. These apartments are elegantly fitted up with magnificent mirrors, chandeliers, sofas, &c., intermingled with pictures, vases, earthenware, and other expensive articles of *bijouterie*. They serve as an ordinary

lounge for the white traders, but their cool and refreshing gloom, with their comfort, neatness, and freedom from the noisy disturbances of the shipping, peculiarly recommend them as temporary hospitals for the white valetudinarian. The roofs are covered with mats manufactured from the palm tree, obliquely placed one above the other. Within the town the soil is for the most part composed of sand, which on the upper ridges and plateaus where the plantations commence, becomes encrusted with a dark vegetable loam, amalgamated more or less with its siliceous substratum. In these districts immense beds of sandstone constitute the general base, the horizontal strata of which are very perceptible in the excavated paths of the suburbs. Vegetation here, as in the other elevated regions of central Africa, flourishes in unsurpassed exuberancy, with a richness and brilliancy of blooming hues that cannot but elicit the admiration of the beholder.

The esculent plants and fruits that meet the eye are the *Achras Zapotilla*,¹ *Dimocarpus Africanus* *Spondeas lutea*,² *Citrus Vulgaris*,³ *Anacardium occidentale*,⁴ *Clerodendrum Africanum*, *Calladium esculentum*,⁵ *Cyperus crassipes*, *Vinca rosea*,⁶ *Convolvulus batatas*,⁷ *Citrus aurantii*,⁸ *Abrus precatorius*,⁹ with various species of *Killingia*, *Hibiscus*, *Cucurbita*, &c. The Egg plant, *Solanum Melongena*, known in

¹ Naseberry. ² Hog plum. ³ Bitter orange. ⁴ Cashew nut.
⁵ Coccoes. ⁶ Scarlet periwinkle. ⁷ Sweet potatoes. ⁸ Orange tree.
⁹ Wild liquorice.

Sennaar, Darfour, Egypt, and other parts of northern Africa, by the name of بادنجان *Ba-dindjan*, is also plentifully cultivated by the natives of this river, who eat it in a raw state always after their meals. When boiled, it serves as one of the ordinary accompaniments of a European dinner in Western Africa, and in its proper season is an excellent substitute for other vegetable edibles less easy of attainment. There are two varieties of the plant indigenous to Old Calabar, the first of which produces a fruit tolerably large, and the other one much less in size. Of the two, the natives prefer the latter. In Soudan, a species of *Solanum* brings forth a black fruit, which the natives consider as poisonous. The *Cassia Occidentalis*, one of the most common African weeds, growing in waste places and other uninhabited clearances, is also found in abundance in the environs of the towns. Under various preparations, it forms one of the favourite remedies of the Joloffs, who term it *Bantamarah*. Among the plants of the *Amomum* family noticed in this river, the *A. Clusii* is the variety most exuberant in growth. It may be found in the spacious thickets in the neighbourhood of Attarpah and the other towns in the river. It is also indigenous to the Gold and Slave coasts, and grows plentifully on the outskirts of Clarence, Fernando Po, where it is known under the name of bastard *Mallagetta*. The seeds are contained in a soft acidulous pulp of a pleasant flavour, which the natives use in lengthened expeditions,

to obviate the inconveniences of thirst. They are also occasionally administered as an adjunct to allay the irritative effects of cathartic and other medicines.* The fences of the outer tenements are adorned with festoons of variegated creepers, of which the *Ipomea palmata*, blended in the waste places with the *Canna Indica* (Indian shot), and *I. involucrata* are the most conspicuous. On the environs of the town the country is characterised by undulations, covered by bushy shrubs, in some parts partially cleared away by the native processes of cultivation. On the native farms may be procured limes, plaintains, yams, maize, papayas, soursops, pine apples, sugar canes, cassada, calavancies, guavas, pumpkins, &c., and also all the live stock and cured fish to be found in the other rivers. A sandy shore, circumscribed by muddy patches, gradually slopes into the stream, its margin being dotted by the cask-houses of the different vessels that are moored only a few yards from them. A narrow creek skirts the northern suburbs of the town, penetrating into a wooden dell, from which issues a flow of fresh water of excellent quality, that supplies the wants of the population. The inhabitants of Attarpah do not exceed ten thousand, excluding the slaves of their agricultural settlements. They are an affiliated branch of the Quorra Ebo's, but are in many

* I am indebted to the kindness of Dr. Pereira for the distinctive characters that separate this from other species of *Amomums*, with which it has generally been confounded.

respects at variance with them, both in their customs and physical conformation.

The diseases of the natives of Old Calabar are almost the counterpart of those mentioned in the former localities, differing only in their type, which is generally of a more sthenic and inflammatory character. Ophthalmia predominates more among the tribes that inhabit the mountainous sandstone districts than in those of the deltas of rivers. One of the principal causes to which it has been ascribed, is the loose siliceous soil reflecting the rays of a fervid sun; but there are, doubtless, other concomitant local influences to which it may be equally referred. Iritis, ophthalmia tarsi, and cataract, are common, the latter often affecting both eyes. Apoplexy, congestions, and other morbid lesions of the brain and its meninges, are more prevalent in the aged people. The curative measures adopted for their relief by the native doctors, who are old women, are the shaving of the head, and the application of a tight silk bandage around its circumference; if, however, these means have not the desired effect, they resort to the process of cupping, as performed by the natives of Bonny. One or two cases of puerperal mania came under my notice at Creek-town, but it is a rare event to meet with women so affected, since persons of all ranks, if suffering from any maniacal disorder, are seldom permitted to reside within the precincts of the larger towns, and are carefully avoided by their inhabitants,

who entertain the curious idea that their saliva, if thrown upon others of sane mind, has the effect of rendering them similarly affected. Their treatment appears to be rather harsh and severe. Should any female by mischance bring forth twins at a birth, she is not put to death, as is the usual custom of the Ebo tribes, but forthwith banished to a small town selected for this purpose near the confines of the Etoo country in Cross River; public opinion deeming the accouchement of such an outrageous character as to affix an indelible disgrace, not only on the woman, but on her family and connections. From the regard paid to personal cleanliness with the habit of daily ablution of the body, they enjoy a certain immunity from those cutaneous maladies so conspicuous among the inhabitants of the other rivers in the Bights. The one of most prevalency is that denominated by the Bonnians Kraw-Kraw, which is an aggravated form of scabies, attended with much irritation. Gonorrhœa and syphilitic ulcerations are frequently seen in native practice; no remedy is used for their cure, and they are allowed to wear themselves out. Cretinism, or goitre, does not appear to exist in this river, nor, indeed, in any of the lowland countries of the Delta; nor are the natives in general liable to these peculiar morbid affections. Bronchocele may be observed at intervals in some of the younger females, but according to the assertions of the country practitioners, it is seldom of long duration, disappear-

ing as they advance in age. Enlargement of the different glands of the face, &c., with *Cynanche tonsillaris* and *parotidea*, especially the latter, are not of unfrequent occurrence during the continuance of the dry easterly winds of December and January. Enemata are sometimes administered to infants and children of a tender age, by means of the bottle gourd (*Cucurbita lagenaria*), on account of the difficulty and repugnance they display to swallow the nauseous purgatives that are resorted to. They are commonly exhibited in dysentery and disorders of the large intestines arising from constipation. Hydrocele, and other diseases of the scrotum, may be observed here, as in the other swampy localities of Western Africa. The people of this town manifest the most decided aversion to the performance of any surgical operation, and so strong is their abhorrence of amputation, that many would rather suffer death than the loss of an extremity. When, however, any portion of the limb has been taken off, either by alligators or ground-sharks, they check the hæmorrhage by applying a hot piece of iron, which has sometimes been of permanent benefit.

From Attarpah the banks present a range of declivitous highlands, extending to Abbutong or Old-town, built about three quarters of a mile up the river on the terminal summit of them. By tradition this town has been asserted to be one of the most ancient date; it has but few inhabitants, who are not engaged in any commercial traffic with

Europeans. Its site is healthy, and commands a fine prospect of the river and its forest scenery. From Old-town the stream sharply turns to the westward through a flat and heavily wooded swamp, on the left bank of which, a few miles distant, are two or three small creeks. The first of them takes a circuitous course to join a branch from the Cross River, and passes by Creek-town or Occorotunko, which consists of a limited number of scattered houses delightfully situated on a sandy eminence that gently declines to the water's edge. Both the buildings and their habitants are considerably less than those of the metropolis. The streets are wide and spacious, not so much frequented, and possess a more picturesque appearance than the other native thoroughfares of Old Callebar. The population of this town averages about five thousand. Around the suburban edifices, and in the open wastes, the ground is clothed with cucurbitous plants and the Indian shot. Among the vegetable productions indigenous to this district may be enumerated a few peculiar to the interior of Africa. Many of them are valued for their medicinal properties, such as the *Sterculia acuminata*,¹ *Sagus vinifera*,² *Parkia Africana*,³ *Pterocarpus erinacea*,⁴ &c. The *Acacia Nilotica*, *Calamus secundiflorus*, *Mucuna urens*, *Bromelia ananas*,⁵ *Myrianthus arborea*, *Avicennia tomentosa*, and *Acacia scandens*, also exist. The fruit of several of the plants belonging to the gourd tribes,

¹ Kola nut. ² Wine palm. ³ Locust tree. ⁴ Redwood tree. ⁵ Pine apple.

which luxuriantly overrun the woodland plantations of the interior, increase to an inordinate magnitude in the fertile regions of Old Calabar. Of this circumstance the natives fully estimate the advantage, by constructing them into household and other utensils which answer a variety of useful purposes. In general they are divided into two unequal portions, the upper fitting into the lower half, and thus forming either a covered dish for the conveyance of their food to the table, or as a commodious vehicle for the preservation and transportation of their clothes, ornaments, and other petty merchandize, from one town to another. Their external surface is polished and carved into elegant arabesque designs.* The *Arachis hypogea*, or African ground nut, one of the most useful vegetables to the natives from the fruit which it produces, is also indigenous to this river. As an article of food, it is employed not only in Soudan, Haussa, and Ebo, but in the Kongo and other countries of Angola, as also by the Wolofs and Mandingos in Senegal and Bambarra. The latter people term it *Teoh*, and cultivate it very extensively for the purposes of commerce, and at the present time many thousand tons are exported from the French and English possessions in

* Ibn Batuta, an Arabian traveller of the 14th century, remarks that "the gourd grows so large in Soudan, that they will cut one into halves, and out of these make two large dishes. The greatest part of their vessels, moreover, are made of the gourd."—*Translation of his book of travels by Dr. Lee*, p. 236.

northern Africa to Europe, on account of the oil contained in the nut, and which has been discovered to answer remarkably well in the manufacture of soap. The fresh leaves and stalks, when administered as food to horses and cattle, are exceedingly nutritious, and animals so fed rapidly increase in both size and condition.

The river, from the outlets of the preceding creeks, is luxuriantly embellished with aquatic evergreens, and is extremely erratic in its course to the northward, its width varying from two to four hundred yards. The illustrious Humboldt has remarked that the common mangrove does not grow in fresh-water swamps; his statement, however, is not altogether correct, inasmuch as many isolated clumps of the *Rhizophoræ* may be observed beyond Old-town, where the stream has not the slightest admixture with the oceanic waters. A few miles on the right, along the slope of some rising grounds, are some villages and native plantations, designated by the earlier slavers as little Guinea company. Five or six miles above them, on the left, are the sandy table-lands of Addearbo, or great Guinea Company, the higher portions of which are from three to five hundred feet in altitude. The slopes of these hills seem in the distance to be somewhat precipitous; they are enlivened by irregular masses of wood, with a number of connected hamlets that peep out from amid them. From this place the river regularly

dwindles in magnitude as it is traced more inland, and at length becomes apparently lost in the interminable swamps that conceal its source.

The natives of the Old Callabar towns, from their early intimacy with European traders, have made considerable progress in the arts of civilization, and, since the abolition of the slave trade, are gradually becoming a people of superior intelligence. Perhaps there could not be a greater proof of their high respect for white residents, than the fact that the penalty of death is enforced against any native who may maltreat, or even elevate his hand to injure them. Slavery here is milder than in the other rivers, and domestic vassalage exists only in the name. Fresh water, stock, dried fish, yams and other vegetables, are plentiful, and can be purchased at moderate prices. This river, in the sickly season, is exceedingly unhealthy to the white seaman, the mortality among them frequently amounting to more than fifty per cent. The currency of these countries consists of copper rods.

European practitioners in any degree conversant with the medical customs of the negroes of intertropical Africa, cannot fail to be deeply impressed with the marked attention paid by the native doctors to the due action of the cutaneous tissues, and their encouragement of this as a means for relieving disease. The Mahomedan code of laws, whose sanatory injunctions are so well adapted for the advancement of the moral

and physical condition of the barbarous pagan tribes in central Africa, strictly enjoins not only ablution but other hygienic measures for the promotion of cleanliness, and the proper discharge of the cutaneous functions. The inhabitants of most of the maritime localities in the Bights are fully acquainted with the importance of these views, and treat the remittent and other fevers to which they are subject by endeavouring to excite a long-continued and copious exudation of sweat from the cuticular pores, by the aid of heated sand-baths, ablutions of hot water, and rude attempts to imitate vapour-baths. In some countries the patient is placed close to a large fire for such purposes, whilst in others he is held over it, water being slowly dropped thereon, so that the steam, as it ascends, may act on the affected portion of the body. After a careful observation of the good effects of this remedial system, I was led to pay more particular study to the utility of its application, and at length to try a modified adaptation of it for the cure of those adynamic remittent fevers so destructive to European life. I have no hesitation in asserting, that not only myself, but many others, who have experienced its efficacy by the speedy restoration to health, can vouch for its superiority over the ordinary practice of venesection, saline purgatives, and large doses of calomel, &c.

Shortly after my return to England from Western Africa, where I had been prosecuting a series of investigations into the nature and causes of endemic

fevers, I was much gratified by the perusal of two interesting articles on the special functions of the skin, by Dr. Willis,* whose pathological views, contained in them, are in several respects strikingly confirmatory of my own, while his application of them to the treatment of tropical diseases merits the most attentive consideration. It would be evidently out of place in these introductory papers to enter into any details concerning his and my own views on the pathology of the febrile affections of tropical Africa; they will be given at a future opportunity, in a separate volume.

Fifteen miles from Old Calabar is the Rio del Rey, or King's River; it is divided from the former by the swampy peninsula of Backassey, the most prominent portion of which has been termed Backassey Point. The Rio del Rey is now never frequented by merchant vessels, although plenty of palm oil, and other lucrative articles, may be procured from the natives, who are a shy and timid race, owing to the want of European intercourse. According to Barbot, those who resided on the upper banks of this river were called Calbonges, and he says that they are "generally a wild and brutal race, very cruel and unnatural; insomuch that among them it is common for a father to sell his children, a husband his wives, and a brother his sisters, or other relations."† This is, however, an exaggerated picture; they are not so ferocious as he states them to be. In the

* *Medical Gazette*, 1843-44, p. 1 and 481. † Barbot, *Op. id.* B. 4. p. 335.

17th century, the Dutch troops from D'Elmina solely exported the commercial products of this river, which consisted of dyewoods, ivory, and slaves. On the eastern side of this stream is the elevated chain of hills known as the mountains of Rumby, which, with the lofty and isolated Qua Mount, may be discerned at a considerable distance in clear weather. The latter is sixty or seventy miles deeper inland, near the source of the Rio del Rey, and is of volcanic formation. On the inferior declivities of these mountainous regions, a multitude of petty villages and towns stud the country on all sides.

From the Rio del Rey to the river Bimbia, the coast inclines more to the south-east, and embraces a tract of land nearly fifty miles in extent. A slight projection of the shore (Pt. Limboh) constitutes the western limit of the bay of Amboises, between which and Bimbia Point is included that district designated in native parlance as Backwullah. The Spaniards named these lofty highlands *alta tierra de Ambozi*. Within the bay of Amboises, or Ambas, are three small inhabited islands, viz. Damah, Ambas, and Mondoleh, the latter of which, being the largest, seems to be well suited for a colonial settlement, a reservation being made with regard to its salubrity. With the exception of Fernando Po, it is, perhaps, the only insular locale that could be recommended for such purposes, either in point of eligibility or healthiness. On the eastern side of Bimbia Point is King

William's town, the metropolis of the district of Bahtungo; and opposite it is Nicholls' Isle, so entitled after Colonel Nicholls, the late worthy governor of Fernando Po. The houses, like those of other African towns, are framed with palm sticks, plastered with mud composts, and are extremely filthy. A few miles to leeward is the village of Massin, adjoining which there is a convenient watering place for vessels.

The river Bimbia, originally called the Rio Pequeno, or little Camaroons river, is about two miles broad at its entrance. It runs for a few miles to the eastward, and divides into two branches, both communicating with the river Camaroons. From this river to Cape Camaroons the land is of a low and alluvial character, and about eleven miles in length. The Rio Camaroons, or Camaroons, formerly termed Jamoer, is one of the finest rivers in the Bight of Biafra, and has obtained its title from the Portuguese word *camarao*, signifying a shrimp. Several minor or tributary streams tend conjointly to enlarge its embouchure, but none of them are of any great magnitude. The western limit of the coast, known as Cape Camaroons, is placed in Lat. $3^{\circ} 53'$ N. and $9^{\circ} 0'$ E. Long. A short distance from it inland are the apertures of two or three large creeks that pass through an impenetrable mangrove forest. A little above this morass are the unimportant villages of Old King Bell, in which the barracoons of the ordinary slave-ships that visited these

regions were erected. In the interior, on the left, are the dark and imposing outlines of the stupendous Camaroon mountain, whose majestic peak (Mongo Malobah) has been stated to be 13,760 feet above the level of the sea. The southern extremity of the shore, on the right side of the estuary of this river, is a remarkable sandy promontory, named Suellaba Point, in close proximity to which is the river Malimba, and a few miles above it that of Quaqua, leading to the metropolitan town of Longassi. The shore from this spot rises to the height of sixty or eighty feet above the water, and is richly clothed by a profusion of fresh trees. On the verge of these heights, in regular succession, may be noticed the different towns of King Bell, King Acqua, Dido's, and John Acqua's. The native habitations are neatly constructed of the usual materials, and are mostly built in long parallel lines on either side of a principal street or avenue, each hut being encompassed by groves of cocoa-nut, palm, and plaintain trees, the light green foliage of which adds an additional interest and beauty to their otherwise picturesque effect. The streets are wide, open, and clean, and in their structural disposition partake more of European designs than elsewhere. The towns are moderately healthy, and the diseases endemical to them assume the same character as those in the Old Callebar. Their remedial treatment is also similar. The aggregate population of these towns may be estimated as below twenty

thousand. By the ancients they were successively termed *Hesperii Ethiopes* and *Achalinces Ethiopes*. They are a well-made, powerful, and warlike race of people, proverbial for their shrewdness and dishonesty. The exports of this river are chiefly palm oil and ivory. There are two kinds of palm oil from the lowland countries of equatorial Africa. The first is of a thick or butterlike consistency, in color a palish yellow, but often of very inferior quality. It is brought from the table lands of Ebo in canoes belonging to the native traders of Brass, Bonny, New and Old Calabar, &c. The second variety is always recognised by its greater fluidity and rich golden tint; its specific gravity predominates over the former, and therefore is less liable to adulteration. It is chiefly produced in this and the Subo districts of Benin river, and is highly appreciated by the oil merchants of Europe. The mortality among the Europeans averages from twenty to thirty per cent. per annum.

Sixteen miles to the southward of Suellaba Point is the river Borea, and from it to Garajam Point, a distance of forty miles, the shore from its recession inland has been denominated the Bight of Panavia. From this part to the Cape of St. John, the coast for a hundred and twenty miles tends more to the westward, is low, thickly wooded, with a sandy foreground, and has two or three unfrequented rivers that empty their waters into the ocean. Little or no trade is carried on with their inhabitants. St. John's Cape is the northern

boundary of Corisco bay, which contains the Elobey and other isles, and also the Rio da Angra, or the river Mooney. Corisco island was, in 1679, taken possession of by the Dutch, who sent a detachment of forty men from their chief factory of Elmina to establish a colony. After erecting a fort and several houses, they were at length forced to abandon it, on account of the great mortality that prevailed among them. Cape Esterias is the southern point of this bay; it is thirty miles from that of St. John's, and is the intervening land that separates the river Gaboon from Corisco. The Rio Gabon, or Gaboon, is situated in Lat. $37^{\circ} 48''$ N. and Long. $9^{\circ} 30' 30''$ E., its mouth being about ten miles in width. On its eastern bank, nine miles from Point Clara, is King Qua Bens-town, and on the same side, three miles from it, is that of King Glasses. A conspicuous projection, Owëendo, or Red Point, may be observed six miles distant from this last town; to the south-east of it are the islands of Konikey and Parrot. On the southern shore, about forty-five miles from the entrance of the river, is Naango, or King George's town. The mercantile exports from this river are palm oil, camwood, ivory, various dyewoods, &c. There are several missionaries settled in the native villages. The French have recently erected a fort near one of the towns, and carry on at present but a nominal trade with its people. Mr. Bowditch, who resided for some months at Naango, in allusion to the vegetation of this country, says, that "the

redwood trees abounded with many which were new to me. The mangroves clothed the banks of the creeks and rivers, even growing some yards from the banks in the water, and their lower branches frequently covered with oysters. The palm-wine tree was plentiful. Like most parts of Western Africa, the woods were so covered beneath with shrubs and plants, that they seemed impenetrable. Immense runners twisting together dropped from the branches like large cables: generally covered with parasites, sometimes adhering to the parent stem, they became themselves a tree, and at others shooting across to the branches of the neighbouring trees, seemed to connect the forest in a general link." The *Hirudo medicinalis*, a common leach which exists in the tropical regions of Western Africa, is of a much less size, but in other respects fully equal to the European species, can be procured from the fresh-water swamps in the upper course of this and the other rivers of the Bight. The natives, from some indefinable dread, evince great dislike to their employment, and rarely, if ever, allow the application of them in disease, invariably preferring the topical abstraction of blood when it is required, by the more tedious process of cupping. One of the most important hygienic measures to which the Africans in general are thoroughly attached, is the cleanliness and preservation of the teeth. The means they take to secure this object are simply by cutting off the young branches of certain

trees, with the properties of which they are well acquainted. These shoots are denuded of their bark, and pared down to the length of from ten to fifteen inches, and are termed "chew-sticks," on account of the mastication of one of their extremities until the wooded fibre has degenerated into a pulpy expansion. With this vegetable brush, during their leisure hours, they unceasingly rub both gums and teeth, till the latter acquire and retain that pearly hue and beautiful whiteness for which they have been distinguished.

The *Bliglia sapida*,¹ *Elais Guineensis*, *Bassia Parkia*, *Cocos nucifera*, *Raphia vinifera*, with other wine palms, more or less abound in the forests and wooded enclosures in proximity to the towns. From the *Raphia*, or, as it is sometimes termed, *Sagus vinifera*, may be obtained one of the most efficient and valuable tonics that has hitherto been classed amongst the catalogue of native medicines. It is prepared by roasting the fruit before a slow fire, so as to permit the separation of the cortical pulp from the nut which it encloses. This substance, after the application of a proportionate degree of heat, gradually loses its intense astringency, leaving a bitter and slightly aromatic principle, which, when suffered to digest in some alcoholic medium, imparts to it that peculiar bitter extractive on which its virtues depend. In the absence of quinine and other tonics, I have frequently exhibited this tincture, in combination with other

¹ Soap berry.

indigenous carminatives in those impaired conditions of the stomach indicated by loss of appetite and frequent vomitings, with other morbid peculiarities, that occur after prolonged attacks of remittent fever, and with the best results.* Grains of Paradise, now usually termed Malagetta pepper, is the produce of the *Amomum Grana Paradisi*, which is found growing in a wild state in the thickets and other wooded districts of this river, as it also is, more or less, in most of the countries of Western Africa. It formerly constituted no unimportant article of commerce, and great quantities were exported to Europe from that portion of the Windward coast which still retains the name of the Grain or Pepper coast. In a mercantile point of view, its value at present is comparatively low. The inhabitants of the different countries in which it is indigenous, use it for domestic purposes, and also as a remedial agent. It is known in Yarruba by the name of *Obro*, by the natives of the Congo and Ambriz as *Dungo-zarzo*, and to the Mandingo's by the term *Palancunpon*. Of the *Cucurbitaceæ*, which also luxuriantly abound

* Pallisot de Beauvois, a French botanist, who resided for several months in the Rio Formosa, in his splendid work entitled *Flore des Roïumes d'Oware et de Benin*, Paris, 1805, has described and illustrated several specimens of the *Palmæ*, and, among others, the *R. Vinifera*, of which he mentions two varieties, viz.:—

1. *Raphia Vinifera*, Calix florum masculorum sessilis., Fructus oblongus.
2. *Raphia pedunculata*, Calix florum masculorum pedunculatus, Fructus subrotundus et subpyriformis. p. 78.

Both of these trees are to be met with in most of the rivers of tropical Africa.

in the Gaboon, the young gourd of the *Cucurbita lagenaria* is, perhaps, one of the most palatable when boiled, inasmuch as it is easy of digestion, and is less liable to disagree with those morbid states of the alimentary canal to which the white valetudinarian is frequently exposed after attacks of endemic disease. Sandy Point, or Round Corner, is the southern termination of the shore in Gaboon River; from it the coast gradually becomes of a more concave outline as far as Cabo Lopo Gonzalves, or Cape Lopez, a distance of sixty-six miles. Near this cape, which lies in Lat. $36^{\circ} 0''$ S. and $8^{\circ} 40'$ E. Long. is the town of King Passol, the neat and uniform appearance of whose houses, with their accompaniment of verdant scenery, somewhat resemble those of the River Camaroons. The Bight of Biafra, or Biafara, may be said to end here, which may also be considered to be the terminus of the Guinea coast, although many of the old geographers state that the Rio Camaroens was its southern limit, and the commencement of Western or lower Ethiopia.

PART III.

THE ISLAND OF FERNANDO PO.

INDEPENDENT of the few small islands that lie contiguous to the mainland in various portions of this Bight, there are others whose magnitude, position, and commercial importance, are such as to render a more minute and distinct description of each a great desideratum. The large islands are four in number, viz., Fernando Po, Princes, St. Thomas's, and Anno Bon. The first of this group of isles is of far greater size than the others, and is, moreover, the one chiefly visited by the homeward and outward bound merchant vessels that trade to this portion of the coast of Western Africa.

Fernando Po was discovered towards the close of the fifteenth century, by a Portuguese adventurer, Fernando del Po, in one of his expeditions to the southern coasts of the African continent. The remarkable grandeur and luxuriance of its wooded declivities, with the precipitous ravines and deep picturesque gorges, embellished by that magnificent forest vegetation alone found within the tropics, surmounted by dark and towering peaks, led him to bestow upon it the appropriate title of

Ilha Formosa, or the beautiful isle. In the course, however, of the succeeding century, in order to distinguish it more conspicuously from the other islands in its vicinity (which, from their beauty and similarity of scenery, might equally merit the application of the preceding designation), the name of its enterprising discoverer was conferred upon it; a title that it now retains, and by which it is generally known.

This island is of an oblong quadrilateral form, about thirty-five miles in length, and from fifteen to seventeen in breadth. It is situated a short distance from the continent, Cape Horatio its northern extremity being only nineteen miles from the opposite bay of Amboises.

Basaltic scorixæ, in different stages of decomposition, with aluminous and other stratified conglomerates, intimately blended with and based on breccixæ of pebbles, ashes, and other substances, the results of igneous action, fully determine the geological features of Fernando Po, and attest its volcanic origin; while the recent exploration of Clarence Peak, in confirmation of the correctness of these views of its physical formation, has been satisfactorily proved to be an extinct crater of considerable magnitude. Throughout the isle, the land in general rises somewhat abruptly from the sea, exposing to the eye faces of basaltic and other rocks embedded in the soft friable masses of scorixæ, the crevices of which are frequently filled up by tufts of plants and by brushwood. In other places,

where the declination of the land is of a less precipitous character, and becomes more easy in its descent, beaches of fine black sand, with huge rounded fragments dislocated from the circumjacent cliffs, are found at their base, the acclivities surmounting which are uniformly concealed by a dense underwood of shrubs and young trees. On the inferior slopes, these volcanic vestiges are covered with a superficial crust of dark red clay, mixed with the loam of decayed vegetation, which, being clothed with extensive woods of bombax, palm, redwood, and other trees of gigantic dimensions, presents a very imposing and beautiful effect. Like all mountainous regions in equatorial Africa, the upper plateaux and heights are diversified by the mingled links of a varied vegetation, which, partly corresponding with the woody productions of a more temperate clime, and partly with those found on the lower or maritime districts of the island, are of a less exuberant growth, and do not assume that gorgeous richness so peculiar to African landscapes within the tropics. Adjoining the limits of these woods, the ground is conjointly strewed by a thick jungle of dwarf bushes and trees, intersprinkled with occasional specimens of the aborescent fern (*Filix arborea*). Beyond this a verdant sward of grass ascends within a short distance from the more lofty peaks, and is selected by game, numerous herds of deer, and wild buffaloes, as their ordinary pasturage. In the dry months, the natives set fire to the long withered stems, in order

to drive these animals into their power, and it is possible that from this circumstance the report has originated of the volcanic eruptions of flame, said to have been noticed on the summit of the mountain. The distant range of highlands, as they rise from the flat and undulating terraces that constitute the extreme periphery of the island, proportionately increase in altitude, and finally converge into two terminal peaks, joined by a continuous ridge some miles in extent. The highest of them, called Clarence Peak, is almost constantly enveloped in fleecy clouds.

This peak was first ascended by Mr. Becroft, in 1843, when the crater appeared to have been of a very ancient date, and was composed of pulverulent lava, around which existed a circular space destitute of any vegetation. In altitude it is 10,160 feet above the level of the ocean, and, in the fine clear mornings of the rainy season, may be observed from the towns of Old Callebar, a distance beyond one hundred miles.

The aborigines of Fernando Po are designated Adeeyahs, but they are better known under the term "Boobie," a word which signifies in their native language a stranger, and seems to have been applied by them to Europeans, from their friendly salutations of "*Cow-way Boobie*,"* when meeting together. These inhabitants, in development of form, possess several physical traits that contribute to sever them from those natives popu-

* How do you do, stranger.

lating the alluvial lowlands of the Delta. Traces, however, of that structural affinity which embodies the majority of the negro races into one family, are equally perceptible, although less prominently marked, in those organic points which more closely ally the multitudinous tribes in this part of Western Africa. In corporeal mould, these people are well and firmly made, of a pliant and muscular rotundity, in stature slightly above the average negro standard (those of Camaroons excepted), and, from their active and regular mode of life, are of a vigorous and hardy constitution. Obesity of figure, so much esteemed by their neighbours of the opposite coast as one of the perfections of a manly organization, and so ardently coveted by the females as the *ne plus ultra* of their beauty, is not appreciated among them in the same favourable light. A moderate fulness in contour, with a disposition to a compact wiriness of the trunk and limbs, may be said to constitute their physical exterior. The cranium, in its outline, partakes of the usual negro conformation, with compressed lateral parietes, retiring forehead, and woolly hair. The face, although somewhat disfigured by their national tokens, viz., three or four large cicatriced incisions, extending obliquely from the zygomatic arch to the angle of the mouth, is somewhat prepossessing, and, in many instances, resembles those of Europeans. The features, from their attenuation and regularity, are less heavy and unmeaning, while the chin and lower facial outline partially lose that harsh, angular

prolongation so predominant in African communities elsewhere. Their skin, of a brownish black, is frequently daubed over with a yellow ochre and red clayey pigment, the latter of which they likewise incorporate with their hair in transverse bands and long pendent jets. With the exception of a few tufts of dried grass suspended over the pubic region, both sexes are publicly seen in a complete state of nudity, most of them being decorated with broken shells, the vertebræ of snakes, and other rude ornaments of savage life. The inhabitants of this isle, from their secluded and scattered villages, are rarely seen in sufficient numbers to furnish any statistical information ; and it is, therefore, from the absence of these necessary details, difficult to arrive at any precise conclusion in respect to the total population. They have been computed, at different periods, to vary from seven to ten thousand. Within the last few years there has been a progressive increase, and their numbers now would fall little short of twelve thousand. They are not amenable to any fixed government, being subdivided into a series of petty tribes, each of which is placed under the jurisdiction of its own independent chief, or *koklerakoo*, whose power, though unrestricted, is not so arbitrary as the monarchical despotisms of the continental chiefs.

The Boobies are a quiet, inoffensive, and unassuming race, tolerably shrewd and intelligent, very kind and affable to white visitors, and fully as warlike and turbulent among themselves, as evinced

by their frequent fierce intestine wars. Differing in several respects, not only in language, manners, and mode of life, from other African nations situated near them, they are still, however, tinctured with their superstitious fears and prejudices, adhering, but in a milder degree, to their barbarous laws and debasing customs.

The Boobie towns are chiefly built on the denuded crests of the midland slopes, and generally consist of from fifteen to twenty habitations, which may be considered as mere sheds. Adjoining them are inclosures for the preservation of sheep, poultry, goats, &c., of which they rear moderate quantities for sale. Surrounding these villages are plantations of yams, cassada, palm and plaintain trees, and other clearances set apart for future cultivation. Of late years the requisitions of homeward-bound vessels have enhanced the value of stock and other provisions; and, from the supply being inadequate to meet the pressing demands, the prices have consequently much advanced.

The diseases incidental to the natives are comparatively limited, both in number and variety; they usually manifest less of that adynamic type which invests nearly two-thirds of the endemic affection of the swampy lowlands. The elevated sites of their towns, located in a salubrious climate, with an immunity and freedom from the moist and sultry atmosphere of the districts below, aided by an invigorating diet, and the salutary exercise derived from their hunting excursions, secure

them from the common, loathsome, and inveterate forms of cutaneous suffering, and give to other morbid deviations from health more of an inflammatory character. Owing to their exposure to the inclemencies of the weather, they are greatly affected with rheumatic and other erratic pains, whose attacks may be readily traced, with bronchitis and other pulmonary disorders, to the same prominent causes. In accordance with their social customs, and in proportion to the preponderance of females in each sept, a plurality of wives are permitted. Women here, as in other regions of tropical Africa, are not very fruitful in child-bearing. Syphilis, and its chronic sequences, are reported to prevail among them on a scale of proportionate severity. Two or three cases of Urethritis, attended by a purulent discharge, have come under my observation; and it is not unlikely that these, and other depraved conditions of the genito-urinary organs, are of such frequent occurrence, as to be readily confounded with Gonorrhœa. Circumcision in the male, and its corresponding operation in the female, viz., excision of the nymphæ and clitoris, so far as I can understand, are not specially inculcated or practised. Ulcers of the lower extremities, almost habitual to the people inhabiting that immense belt of forest jungle extending from the Rio Formosa to the Rio del Rey, are also prevalent in the Boobie towns, but under a more benignant aspect, being rather simple indolent sores than the foul and destructive phlegdenic ulcer of syphilitic

taint. Young plaintain, or other tender leaves, besmeared with palm oil, and kept on the ulcerated surfaces by grass withes, encircling the limb, are the only curative means their intellectual resources could invent. The marks of numerous superficial scarifications for the abstraction of blood, may be distinguished on different parts of the body; and this method for the removal of inflammatory pains from the integument, or deeper seated textures, is one universally of African suggestion. A rude and singular process of venesection is had recourse to in diseases of more serious import; it is performed by making a vertical incision on both sides of the vein, which is then raised on the point of a spear and divided transversely. In amputation of the hands, a cruel penal sentence summarily inflicted on all women guilty of conjugal infidelity, the bleeding is restrained by the application of a heated piece of iron, or dipping the stumps in boiling oil, the resulting eschar, when separating, not being followed by any ill effects or further hæmorrhage. Females thus mutilated may be seen daily wandering about the streets of Clarence.

In the preceding cursory remarks, I have endeavoured to convey a general topographical view of this isle. I shall now proceed first to furnish a more detailed description of the localities visited by Europeans, and then enter into an examination of the vague and unscrupulous reports so assiduously adduced in support of the insalubrity of its climate

Between two and three hundred years had intervened, subsequent to the discovery of Fernando Po, before an attempt was made towards its colonization. The Portuguese, in consideration of the cession of Ascension, yielded up the sovereignty of this island into the hands of the Spaniards, who forthwith commenced the establishment of a colony in Melville Bay, about the year 1780. In consequence of the growing competition of other nations already engaged in the slave trade, at that period fully legalised and in the height of its prosperity, it was discovered that their success would be much facilitated by a central dépôt, placed at a moderate distance from the embouchures of those rivers from whence the exportation was carried on ; accordingly a site on its western shore was determined on (Melville Bay), and the erection of a fort rapidly completed. The new settlement, however, after some years' trial, did not prosper. Whether the oppressive policy or coercive measures of their governors, for the subjugation of the natives, had aroused their hostility, and converted them into enemies, and thus compelling them to quit the place, it is not easy to ascertain. In all probability, the failure of their commercial speculations, with the seizure and deportation of those aborigines who fell into their hands, was the real cause of their enmity, an enmity which has undisguisedly descended even to the present day.

On account of the enormous sacrifice of life at Sierra Leone, the British government, instigated

by the favourable representations of the local eligibility and salubrity of Fernando Po for the suppression of the traffic in slaves within the Bights, resolved to occupy one of the many lowland tracts so available for a mercantile communication with the opposite continent. With this intention, Captain W. Owen was despatched in his Majesty's ship *Eden*, with instructions to survey a spot suitable for the foundation of a colony, and in October, 1827, this vessel arrived in Maidstone Bay with a cargo of emigrant artificers, provisions, &c., from Sierra Leone. Point William, a bold and significant promontory, with the circumjacent district, was formally selected and taken possession of, its underwood and superabundant forest timber being cleared away, without any opposition on the part of the natives, with whom several amicable treaties were effected. The name of Clarence was then bestowed upon it, in honour of his late Majesty, William IV.

From the progressive influx of settlers, the new town eventually increased both in magnitude and population, and soon became sufficiently flourishing under the judicious control of Colonel Nicholls, the previous commandant of Ascension Island, who had been sent as governor with a detachment of marines to garrison the place.

In the meanwhile, nothing could exceed the surprise, consternation, and jealous fears of the other African colonies, at the contemplated transference of the various official courts of business to their

rising rival, and every effort that ingenuity could devise, or misrepresentation produce, was brought forward to avert the consummation of such a calamitous event. Exaggerated and highly colored statements were secretly circulated concerning the extreme unhealthiness of the island, and particularly directed against the town of Clarence.

Report after report was industriously circulated by individuals who had never seen the island, the style of which was eminently calculated to foster intimidation, and engender those gloomy feelings of dislike and dread that might lead to the utterance of opinions detrimental to its future permanency. Slight and trivial ulcerations were magnified into phlegdenic abscesses of the worst character, and simple remittents and intermittents into fevers of the lowest asthenic type. To recover from their attacks was unquestionably beyond the reach of science or human aid! These promulgations had the wished for success; the admiral of the station paid a transitory visit to the town, and immediately after his departure a condemnatory report emanated from him, not only against it, but the whole island. This proved its *coup de grace*, the opposition interests having achieved the victory, and Clarence was relinquished to those inhabitants who were willing to remain in it, the governor, officers, and garrison being withdrawn. The West African Company purchased the military buildings, storehouses, and other effects, and appointed Mr. Becroft their agent and superintendent.

Notwithstanding the loss of government patronage, the town continued to improve, and promised fair to augment in wealth and commerce. Unfortunately Mr. Becroft was recalled, and several agents successively filled his post, whose impolitic and vacillating measures became so thoroughly unpopular, as to forebode the worst results for the welfare of the colony. In 1842, the company sold their vested rights and privileges to the Baptist Missionary Society, by whom a numerous body of white and colored teachers were transmitted to inhabit their official residences. Their arrival, so far, has induced no beneficial change; the ravages of neglect and decay, that too palpably indicate the fallen condition of this once flourishing settlement, still remain unchecked. In 1843, a Spanish man-of-war entered the harbour of Clarence, and on the 27th of February hoisted her colours, and resumed the dominion of the island on behalf of the crown of Spain, reinstating Mr. Becroft as sole governor and commandant, under whose authority it now continues.

Maidstone Bay comprehends that intermediate line of coast between Cape Bullen, to the westward, and Port William, on the north-west. It is shallow, with a regular gradation of soundings, commencing at twenty-four fathoms, and, from its smooth waters and sheltered position, affords a secure anchorage to ships of any tonnage. Although it is not beyond four or five miles in width, Port William is a remarkably long and narrow promontory, running

out for some distance seaward, half a mile to the south-west of which is another and slighter extension of the shore, called Adelaide Point. Enclosed by these two projections is a semilunar indentation of the land, known as Clarence Cove. In close proximity to the latter point are two detached rocks, thinly sprinkled with vegetation, and connected by a reef; they are also denominated Adelaide Islets. A strong and useful wharf formerly stood in the centre of the Cove, and constituted the landing place to the town; it has now partially disappeared, and the black sandy beach on either side of it answers the purpose. Some ruinous sheds and storehouses, once the property of the defunct African Company, lie around it; and to the left of them, on the strand, is a cleared space, on which the trading canoes of the natives are drawn up.

The road leading to the town obliquely winds to the summit of the almost perpendicular declivities, near one hundred feet in height, the ascent of which, from their steepness, is extremely inconvenient. Commanding a prospect of the bay is a range of seven or eight substantial and well-built houses, whose snow-like exteriors may be discerned many leagues distant; these edifices are built within a dozen yards of the cliff, a commodious and neatly constructed road, fringed by the *Cactus Opuntia*, or prickly pear, passing in front of them. They are now inhabited by the Missionaries and more opulent colonists. Paradise, Government, and

Longfield houses (the latter recently pulled down) were erected at the expense of the British crown, and originally formed the residences of the executive and commissariat officers. Attached to Government House is an extensive but negligently cultivated garden, in which orange, lime, soursop, coffee trees, and various esculent vegetables grow in profusion.

Midway on Point William is the building that once was reserved for the hospital of the settlement and the sickly crews of vessels, but now ignobly desecrated by mercenary uses wholly in opposition to the humane intentions of its founders. Though of restricted dimensions and somewhat inefficient in its internal economy, its healthy and congenial site, isolated from the town with its loitering inhabitants, somewhat partially redeem these deficiencies. Its position is tolerably well chosen for the requisite ventilation by its exposure to the full sweep of an invigorating sea breeze, whose delightful and salutary coolness, in combination with the lulling sound of the surf beneath, and the beautiful mountain scenery around, contribute to produce a good effect on the languid patient, and assist in the removal of that despondency and depressing langour which exerts such a baneful influence on the frames of fever-worn seamen and others.

In the vicinage of the hospital may be traced the ruins of the magazine (built of stone), blacksmith's shop, and other buildings; and further to

the northward may be seen a small monumental obelisk, with an appropriate inscription recording the melancholy fate of those persons who perished in the ill-fated Niger expedition.

The town of Clarence is erected on a clear and level area, gently declining as it approaches the base of the chain of woodland hills that skirt it on the west. It is located in latitude $3^{\circ} 45'$ north, and longitude $8^{\circ} 47'$ east. Its geological conditions are in all respects conformable to those of the strata of the sea cliffs, and are of the same elevation. The plan of the town is that of a square, whose longest diameter exceeds three quarters of a mile, from the lateral prolongation of the houses at irregular intervals. Two or three principal avenues pass from one common thoroughfare on the verge of the beach, and are intersected at right angles by a number of lesser streets, all of which are uniformly wide and spacious, but disgustingly dirty. The native dwellings, composed of pieces of wood roughly fashioned and put together, and roofed either with shingles or palm-leaf mats, seldom rise above one story in elevation, except in a few instances, such as those of the more respectable inhabitants and the government edifices previously alluded to. They occupy in picturesque arrangement both sides of the street, the majority of them being whitewashed externally, which gives the whole an air of neatness and comfort. Attached to each is a small garden of fruit trees and plants, enclosed by fences of the *Jatropha Curcas*

and other shrubs, the bright glossy verdure of which confers a pleasing and homely charm on the *tout ensemble* of the place. The greater portion of these habitations, however, are falling into a state of decay, and present a very dilapidated aspect, while from indifference and a natural indolency, their occupants have suffered a rank vegetation to pervade their gardens and even the public thoroughfares.

To the southward of the town, half concealed by thickets and dense masses of foliage, is the burial ground of the colony. In it lie interred the remains of Richard Lander, Captain Bird Allen, R.N., Dr. Vogel, the celebrated botanist, and others, whose graves with those of the inhabitants are overspread by a luxuriant carpet of grass and weeds. R. Lander was attacked by the people of Hyammah, in conjunction with the crews of some Bonny canoes, when proceeding on a trading mission up the Quorra in an open boat. A wound received in the skirmish by a musket shot of copper, that penetrated the glutei muscles, soon occasioned gangrene, which, from inattention and the want of medical aid, rapidly proved fatal, and he expired in Clarence shortly after his arrival, in the prime of life.

Apart from the perils and difficulties that beset his path in the exploration of the maritime regions of equinoctial Africa, the inexperienced European has to contend against far more deadly enemies in the deleterious nature of those influences pecu-

liar to the clime and country which he visits; and I may remark, in this place, that an estimate may be formed of the mortality from the fact, that out of near forty travellers in Africa, no less than two-thirds have fallen a sacrifice either by disease or the treacherous hostility of the natives. Among those who have perished in the Bights and the central countries in communication with them, may be enumerated Mungo Park, killed at Boossa; Clapperton, who expired at Sakkatoo; Nicholls, in Old Callebar; Belzoni, Agatto; Lander, Clarence; Coulthurst, Old Callebar, &c., all of whom, with the exceptions of Park and Lander, died from endemic maladies.

Behind the cemetery is Hay Brook, a rivulet of fresh water, highly extolled by the inhabitants for its excellent qualities, particularly for the cleansing of clothes and other domestic uses. On the western outskirts of the town is a congregation of mud hovels termed Kru-town from a number of stray Kru-men making it their temporary home. From this suburb a road to the left leads through the woods to Cockburn Cove, a mile distant, into which a small running stream (Cockburn Brook) empties itself.

The population of Clarence varies from eight hundred to one thousand, and the houses, including those in the course of erection, amounts to one hundred and eighty. The negro inhabitants are an admixture of most of the races of Western Africa, and include those of Haussa, Dahomy,

Popo, Gold Coast, Old Calabar, Ebo, Benin, Cameroons, Sierra Leone, Congo, Bornou, Yarruba, Bambarra, Adj-jah, Gaboon, &c. With them are amalgamated a few whites and a semi-coloured offspring of a blended parentage.

Exclusive of the vegetable products ordinarily cultivated by the natives of the continental districts, there are also others found in Clarence, such as tomatoes, cabbages, ginger, African plums, tamarinds, eschalots, indigo, papaws, arrow-root, sweetsops, soursops, cotton, kola nuts, and a large red pepper of a fine flavor. The yam is abundantly grown in the fertile plantations of the Boobies, and constitutes their principal article of diet. It differs in several respects from the Ebo and other continental species, surpassing them in delicacy and in a nutritious, mealy farina, being divested of that dry and woody fibre so common to the other varieties. These yams are deservedly esteemed as the best of their kind in Western Africa. Their agreeable and healthy qualities may allow them precedence beyond most edibles that are placed on the European's table; their daily use, therefore, can be conscientiously recommended to all unseasoned visitors, as much for their beneficial effects on the system as one of those dietetic prophylactics on which he must chiefly rely for the maintenance of his health. The populations of most countries where it abounds value it as an indispensable necessary of life, and gratefully celebrate the maturity of its growth by a round of feasts and religious ceremonies.

Plantains, bananas, pine apples, oranges, limes, and other esculent fruits, may likewise be procured by paying an inordinate price for them. Yams have become more scarce since the importation of some fresh settlers from the West Indies, and can now only be purchased at the rate of three dollars per hundred.

Strange as it may appear, the cocoa-nut tree, of such universal prevalence in the Delta, is not indigenous to the isle, nor is there any record of its existence in any of the upland districts, although the oil and wine palms flourish there in profusion. Six or eight years since, two young shoots were planted, one at Clarence, the other on Cape Bullen, and the masters of the Bonny vessels introduced and planted the nuts of several in Goat Island, which now thrive remarkably well. Sheep, goats, poultry, &c., might be on the eve of extinction at Clarence, judging by the price affixed to them. Fish, however, may be caught in any quantity along the coast with a seine, particularly in the lesser bays, in the sequestered and sandy nooks of which the green turtles (*Testudo Mydas*) deposit their eggs during the earlier months of the dry seasons. These turtle are of an immense size, and afford to the debilitated invalid a wholesome repast in the way of fresh food. Their haunts, when once discovered, render them of easy capture. Deer, monkeys, game of various descriptions, &c., may be shot in the interior jungles. Numberless little rills flow from the higher mountain steeps, and unite in their passage through the wooded vales, swelling

into larger streams, which again conjoining into moderate sized brooks, rapidly descend over the broken undulations of the lowlands, and disembogue themselves through outlets seldom difficult of access. Thus fresh water may be easily obtained, the sole trouble and expense being its conveyance on shipboard. At the landing place of Clarence, an iron tank, continually filled from a natural spring, supplies the shipping that touch there, and the mouths of Hay and Horton brooks in Goderich Bay, to the right of Point William, yield equal facilities for watering. The trade of the island is centered at Clarence, and is as yet in its infancy. The purchase of palm oil, ivory, and stock at Bimbia and Camaroons, embrace their chief commercial transactions.

From Cape Bullen to St. George's, or West Bay, the coast extends to the northwest to the distance of thirty miles, precipitous basaltic rocks restricting the boundaries of the land. Indented at intervals are various secluded bays or coves, surrounded by brushwood and forest timber of colossal proportions. In most of them, where they form the terminations of the larger ravines, fresh water rivulets exist, which, passing over the rocks, have all the coolness and purity of those belonging to a more temperate clime. Adjacent to the eastern point of West Bay are two small islets named Goat and Kid Islands, or rather isolated rocks detached from the mainland, the superficial soil of which nourishes a few cocoa-nut trees, first planted

by some English traders, as I have previously mentioned.

Perhaps among the picturesque and diversified landscapes that occasionally appear on the African coast, none can be found to vie in luxuriance or natural beauty with the picture which this bay presents to the eye of the stranger. Rising majestically several thousand feet above the level of the ocean, and soaring far beyond the masses of clouds that cling to its wood-girt summits, the dark and sombre mountain peaks of the isle stand pre-eminently forth in bold relief against the lighter sky, the rich and magnificent forest vegetation which decorates its slopes, teeming with an endless variety of foliage of all tints and hues, from the red and russet drapery of sere autumn's reign, to the gay and lovely verdure of more joyous spring, exciting a thousand confused sensations of pleasure, admiration, and delight. The sickly and wearied invalid, half tired of life, contemplates with surprise and delight this beautiful panorama, and as he pauses, in doubtful mood, a host of pent-up emotions gush forth—hope, joy, and a renewed life, with visions of a cheerful and happy home, arise and animate him with brighter prospects for the future.

A great diversity of opinion exists at the present moment respecting the salubrity of Fernando Po, owing to the conflicting statements of medical officers and others who have visited or resided for brief intervals on different districts of the island.

A dispassionate examination, however, into the merits of these reports will fully disclose the meagre data and partial information upon which the majority of them are based, and, at the same time, expose the exclusive tendency of their views, obviously in several, the result of very superficial knowledge and cursory experience. The hasty generalization of a few isolated facts, unsupported by the authority of consecutive records, or the confirmatory proofs of subsequent investigation, can never be relied on as affording a decisive estimate of the character or prospects of any comparatively unknown country, nor ought such to be adduced as a consistent exposition of the real circumstances of the case. A palpable error, and one that has hitherto been unhesitatingly followed, is that which ascribes the apparent unhealthiness of one particular locality as applicable to the whole island. Probably, therefore, among the principal causes which have produced an unfavourable opinion of the town of Clarence, was its near propinquity to the main land, and from this circumstance alone, it would seem that in several instances the inexperienced visitor has been betrayed into the belief that the place was subject to the same noxious influences and adynamic diseases that were prevalent in the fenny lowlands of the opposite continent. Many considerations, however, tend to prove that the site of this colony was not the most eligible that might have been chosen, if salubrity or the health of the European settlers had been the

primary object in view ; and very little doubt therefore remains, that its selection was guided more from the commanding position which it occupied ; a position that, combining various facilities as a port, would either serve for the progressive establishment of a commercial intercourse with the natives of the adjacent coast, or as an advantageous station and depôt for the naval cruisers, in which they might refit or watch the estuaries of those rivers where the contraband traffic in slaves was then carried on. Again, another prominent event, which to the more timid furnished an apparent but illusory proof in support of the validity of these conclusions, was the fearful severity of that fatal epidemic introduced on the isle by H.M.S. Eden and Champion in 1829, from Sierra Leone.

In order to place in a more conspicuous point of view the peculiar effects of the climatorial influences of Fernando Po, it will be advisable to briefly study their action on the European constitution under a two-fold aspect, viz. :

1. In the unacclimated, or those Europeans who have not on any previous occasion resided on any part of the west coast of equatorial Africa.
2. In the acclimated, or those who have been subjected to the diseases of this or other portions of the African continent.

1. It must be borne in mind that the preceding remarks are not intended to inculcate the impression that the lower districts of this island are so

salubrious as to be altogether exempt from that particular class of febrile and other similar morbid affections endemic to other insular localities, nor yet to suggest the view of their immunity from those diseases which, although comparatively trivial in their nature, nevertheless occasionally partake somewhat of an epidemic character, and are more or less common at different seasons of the year. A wide distinction, however, must be drawn between these and the more fatal maladies of the adjacent continent. It would appear to be almost an inevitable law in these regions of Western Africa, that no individual, under whatever circumstance he may have been brought up, or for whatever length of time he may have been stationed in other tropical countries fully as unhealthy, can claim any exemption from the attacks of the various local and other climatic fevers of this equatorial division. The endemic remittent, or, as they are often improperly denominated, the seasoning fevers of Fernando Po, are much milder in their invasion, less dangerous in their career, and are rarely if ever of that pestilent or insidious asthenic type, which in the debilitated or broken up constitutions of seamen and others always forebodes the worst results. When judiciously treated in their earlier stages, the subsequent prostration of both mind and body is not so great, the disease becoming more tractable under the administration of the ordinary febrifuge medicines; and the medical officer, in general, will experience but little difficulty

in bringing his patient safely through the ordeal of this long dreaded and punitive process.

2. Another fallacious argument which has been brought forward in evidence of the insalubrity of Fernando Po, is the fact that several of the seamen of vessels who have occasionally touched at the island, have been prostrated and cut off by fever or dysentery within a brief period after their arrival at one of the anchorages.

These febrile outbreaks are, however, not of such frequency as might be supposed, considering the statements which have from time to time been bruited forth referring to their occurrence. Doubtless the problem of their visitation may be satisfactorily solved by a rational explanation of a similar series of events which have casually come under my cognizance during a residence at Clarence in the rainy season. Europeans composing the crews of men of war and merchant vessels who are constantly exposed to the predominant influences of an African climate, either in proximity to the shores or within the estuaries of rivers, are not always susceptible to the deleterious effects of malaria that emanate therefrom, nor do they invariably suffer from the immediate attacks of fever, as might be naturally expected would be the result of a prolonged existence within their sphere. In numerous instances, individuals have been known to enjoy excellent health for a considerable period after the imbibition of the morbid germs, owing to a certain aptitude or adaptation of their consti-

tution to the ordinary climatorial agencies of the locality. In these cases, the slow developement of the germs, and their non-arrival at the proper stage of maturity, may be ascribed to that state of dormancy or quiescence which originates from the absence of the true exciting cause. In support of these views, I shall adduce the following illustration:—

Towards the close of the month of June, 1841, a large ship, to which I was then attached, having a complement of forty white men, passed from the Old Calabar river to Fernando Po to procure the necessary supplies of fresh water and provisions prior to the homeward voyage. During the period of seven months in which the crew were engaged in loading the vessel at the usual anchorage of the town, they suffered but slightly from the endemic diseases of the place. Some weeks, however, previous to their departure, in consequence of the temporary roof which protected the vessel having been removed, the sailors were exposed to the heavy rains, particularly for the few days they were occupied in navigating the vessel over the different bars of the river; all, however, were in the enjoyment of good health when they entered the port of Clarence. Forty-eight hours had barely elapsed from their arrival, when several of the men began to complain of the premonitory symptoms of fever, and before a week had passed over, the majority were prostrated by severe remittents, from which many were with difficulty recovered. It will be manifest that in these cases the exposure

to the rains, previously to their arrival in Fernando Po, were the predisposing sources, while the transition from a humid and sultry atmosphere, to a climate with a temperature comparatively low, were the real exciting causes of the disease.

Among those writers who have directed their animadversions upon the insalubrity of Fernando Po, Mr. Boyle may be cited as the principal authority, to show what degree of faith is to be placed on the accuracy and value of official reports drawn up from perverted views and the ex-parte assertions of others. It is a curious fact that this officer, who was colonial surgeon of Sierra Leone, never once visited or resided on this island, and who, in place of investigating the truth or soundness of these reports, appears to have coolly set the affair at rest, by implicitly relying on the various cogent reasons and other laudable motives which influenced his colonial compeers in their hostility against the colonial settlement of it. He remarks that "unhappily this island has hitherto proved no garden of Eden—no oasis of the desert; but from the first moment of the British flag waving over its soil, up to the last advices, it has been rapidly declining in reputation.—But the mortality which has occurred among the European settlers is the most decisive proof of the insalubrity of the island."* Mr. Boyle was, perhaps, not sufficiently conversant with diseases of the Bights to be aware that the great devastation and loss of life created

* *On Diseases of Western Africa*, p. 354.

among the early settlers proceeded not from endemic influences, but from the introduction of that epidemic fever on the island, termed the yellow or Bulam fever; one that, in several respects, is clearly distinct from the remittents of the swampy regions of the opposite coast, and is evidently unknown in those localities frequented by the white traders. Precisely under the same category may be included those observers who, viewing it in the distance, have calmly attested its unhealthiness by stating that it is "swampy in the extreme!" To prove the wide discrepancy of opinion that prevailed at that period on this question, and at the same time to afford an apparently unbiassed and impartial description of the state of affairs, I shall quote a writer in the *Quarterly Review*, who, in allusion to the inutility of Sierra Leone as a settlement for the civilization of the native Africans, states,—“It was to remedy those evils that an establishment has recently been formed on that most beautiful, fertile, and magnificent of islands, Fernando Po; it is the favourable prospects that these evils will be remedied (viz., the sufferings and deaths of the captured slaves on their passage) that has caused so much jealousy, and so many false reports as to its unhealthiness, from the free negro traders of Sierra Leone. Instead of listening to them, let us hear what Capt. Owen says, after a residence of ten months. We have before us a letter of the 23d of September last, in which he writes thus:—“The health of our settlement

has been as good as it would have been in any part of the world. There has not been a single death for nearly four months, out of a population of six hundred and fifty souls; and I have only to add, that nothing can exceed the good order and good disposition of my little colony, and that no spot in Africa is so eminently suited for a naval and commercial station. The deaths that occurred in the first five or six months were occasioned by ulcered legs got in clearing away the jungle, and by the imprudent artificers, while in a state of fever, indulging to excess in ardent spirits; but the causes, and with them the melancholy effects, have ceased."* Colonel Nicholls, the former governor of the island, with Mr. Becroft, both officers of long residence and great experience of this part of Africa, fully coincide with the previous remarks, and the former also candidly avers that he "has known a ship of war stationed for several years at Fernando Po that never lost a single man until she sent a prize up to Sierra Leone, and half the people died there."† To place in a prominent point of view those climatorial distinctions and variations that may be noticed between Fernando Po and the regions of the Delta, I have carefully drawn up the following table, compiled from the observations of Colonel Nicholls, Mr. Becroft, and myself, the greater portion of which were taken in Government House, and on board several vessels moored in the harbour:—

* No. 77, p. 181.

† Vide *Parliamentary Report*.

MONTHS.	6 A.M.	2 P.M.	8 P.M.	Average throughout the day.	REMARKS.
January	72.0	85.0	80.5	79.1	Fine clear weather, with light and pleasant breezes.
February	73.0	86.0	84.5	81.1	Fine but rather sultry weather, fair sea breezes.
March	72.5	87.0	81.0	80.1	Fine weather, light airs and sea-breezes, occasionally sultry.
April	71.0	84.0	80.0	78.3	Weather much cooler, slight rains towards the end of month.
May	70.0	80.5	74.0	74.0	Rains and strong sea breezes, occasionally tornadoes.
June	69.5	80.5	70.5	73.5	Rains heavy, cloudy weather, with tornadoes.
July	71.5	80.0	74.5	75.3	Rainy and cloudy weather, with occasional tornadoes.
August	70.0	80.5	76.0	75.5	Rains decreasing, frequent calms, and slight showers.
September . .	67.0	79.0	78.0	74.7	Ditto, slight showers, light sea breezes.
October	71.0	80.0	76.0	75.7	Fine weather setting in, sea-breezes, with occasional showers.
November . .	73.0	83.0	76.0	77.3	The commencement of dry season. Fine weather.
December . .	73.5	84.0	76.0	77.8	Fine clear weather, sultry, with light winds.

To Europeans who have been stationed for any length of time in the rivers or inland districts of the Delta of the Niger, a visit to this island would be attended with many advantages, especially to those who have been sufferers from that low nervous irritability or mental despondency; distressing sequelæ that not unfrequently supervene after the visitations of remittent and other febrile diseases. In agues, chronic dysentery, and other morbid affections of obstinate duration, the change of climate often produces the most decided benefit, and I can only conclude these observations by remarking, that had those individuals whose anxiety has hitherto been to depreciate the utility or decry the healthiness of this island, been resident for the same number of years with myself and others in the pestilent swamps of equatorial Africa, they would ere this have learned to appreciate the value of the boon so appropriately placed within the grasp of most African voyagers, and one which, above all other considerations, is prized by the convalescent, viz., the rescue from a premature death, and the restoration to the usual occupations of ordinary health.

PART IV.

THE ISLANDS OF PRINCES, ST. THOMAS, AND ANNO BONA.

THE ISLAND OF PRINCES.

THE Island of Princes is situated one hundred and five miles to the westward of Cape St. John, the nearest point of land on the African continent, and about one hundred and thirty miles to the south-west of Fernando Po. It was discovered so early as 1471, and the name of Ilha de Principe conferred upon it, in honour of Don Henry, a Portuguese prince of the blood royal. The merit of its discovery has been ascribed to D. E. Santarem, whilst by others it has been asserted that John de Escobar first promulgated its existence. In extent it is rather small, being only ten miles in length, and six in breadth. As it is somewhat elevated above the ocean, it may be discerned on the clear evenings of the rainy season for a considerable distance. The most striking features that offer themselves on a first view, are the curious and grotesque outlines of several of the mountain peaks that stud the island in all directions. One of the

most remarkable of these conical rocks has been named the Parrot's Bill, and another has had the title of Prince's Mount bestowed upon it.

The soil, for the most part, is a mixture of decomposed volcanic remains and vegetable matter, and is very fertile and productive, nearly all the native plants, after their first cultivation, growing more or less in a wild state, and requiring but little care or notice. The whole island is luxuriantly clothed by an enlivening woodland scenery, with an occasional oasis worked out by the hand of man, the gayer verdure of which lends additional beauty to the spot, when contrasted with the stately trunks and dark green foliage of the circumjacent forests.

Princes possesses two ports, the first of which, designated Port Antonio, is situated on the north-east side of the island, at the bottom of a capacious landlocked bay, known under the same appellation, the entrance of which is guarded by two small dilapidated forts. The anchorage within this harbour has been stated to be one of the best in the island, not only as regards a secure shelter from the tornadoes, but from the convenient facilities it affords for the purchase of refreshments, &c. The houses are generally of a mean and dirty aspect, and those erected upon European designs are not endowed with any great pretensions to comfort or neatness, and are fast falling into decay. The town is more or less in a filthy condition, while the scattered huts and their irregular outhouses,

intersected by narrow streets, are bordered by a rank vegetation, which with other tokens of neglect and indifference, impose on the mind of the stranger no favourable impression as to its prosperity or salubrity. The surrounding scenery, however, is exceedingly beautiful and picturesque.

The population of the island mostly consists of negroes descended from the slaves formerly imported from the neighbouring coastal regions: these, with mulattoes and other mixed races, and a few Portuguese residents, are the only inhabitants to be met here. The commerce now has dwindled down to the verge of extinction; a few native boats and canoes, an occasional man-of-war, with two or three trading vessels, are the sole indications of its present mercantile traffic. Provisions, such as beef, mutton, fowls, with different kinds of vegetables, may be procured without difficulty. Good fresh water may be also abundantly supplied.

The second harbour, named Agulhas or West Bay, lies on the western coast of the isle, nearly equi-distant from both extremities. It is two miles broad, and has sufficient depth of water to recommend it to vessels of the largest burden. Fine coffee, sugar, tamarinds, pine-apples, and other tropical fruits, flourish in all the predial districts, while wood and water, two indispensable requisites in the nautical economy of homeward-bound vessels, can be obtained on moderate terms. The centre of this island has been asserted to be situated in Lat. $1^{\circ} 25' N$ and $7^{\circ} 20' E$.

Princes' island, from its position, some miles distant from the main continent, from the non-existence of swampy lowlands and wooded marshes, and those morbid influences so invariably generated in the pestilential regions usually visited by the African trader, appears to have acquired a far better sanatory reputation than can be justly ascribed to it. Although its isolation from the neighbouring main renders it less liable to that moist and sultry climate and those noxious exhalations so peculiar to those swamps, yet time and the experience of many individuals has however clearly proved that there are some seasons of the year in which there is little or no variation in the form of its diseases, nor any dissimilarity from their ordinary type, the mortality in this island has been equally as great as in the other habitable localities of the Bights; nay, frequently more so, from the frequent ravages of those epidemic scourges which in their visits attack indiscriminately both black and white people, and spare neither age, rank, or sex. Such then has been the more correct delineation of the climate and endemic diseases of Princes; the island is, therefore, one that can never be conscientiously recommended for the preservation or restoration of the health of any invalid; and although this statement may be at variance with those who profess to have a more extended knowledge of these subjects, yet I feel assured that the result of a few consecutive trials will fully demonstrate that the opinion I have advanced is one that is based

upon recorded data, and is in accordance with the observations of long and enlightened experience.

THE ISLAND OF ST. THOMAS.

THE Island of St. Thomas, the next in size and importance to Fernando Po, is of an oval form, about thirty-two miles in length, and eight in breadth. It is situated sixty-six miles to the south-west (S.W. by W.) of Princes, which it far surpasses, not only in magnitude, but in population and commerce. Near the close of the fifteenth century, some Portuguese navigators fell in with it, and the promulgation of their discovery, with an exaggerated and highly colored picture of the advantages that might ensue from its possession, soon occasioned its occupation. In a few years it was deemed a valuable colonial acquisition, so much so, that the attention of government was more immediately directed towards its welfare, under the fostering protection of which it rapidly rose in prosperity, and in the course of time became one of the most flourishing settlements of the Portuguese crown in this part of Africa.

Prior to the colonization of Brazil, and ere its immense productive resources were developed, this island had so far advanced in importance as to constitute the chief emporium of the Portuguese commerce; beneficial attempts had been directed towards the introduction and establishment of Christianity, the partitioning of districts for the

improvement of the ground and the growth of its vegetable exports, with the construction of public roads, villages, and other national works, all of which proved eminently conducive to the stability of its mercantile interests. Plantations of indigo and the sugar-cane, which then comprised its staple articles of traffic, yielded such profitable harvests as to amply compensate the cultivator for all the toil and expense laid out on them. Under these prosperous circumstances, numerous sugar mills were constantly kept in full employment, and ultimately proved a source of no inconsiderable emolument to those who had the management of them.

The coffee-tree also received due consideration; large tracts of land were planted with this remunerative commodity, its excellent flavor, and other peculiar qualities, placing it high in European opinion, while its manifest superiority over all other kinds then in the market, induced the parent country to secure its importation by a strict and timely monopoly. At length a deadly rival sprang up, which soon subverted these brilliant prospects; the rich and magnificent expanse of wealth disclosed by the Brazilian territory to their mercenary desires, quickly led the Portuguese to pay a more studious regard to its capabilities, and the lucrative results that might accrue to them from their conquest of it. This they soon effected. The boundless magnitude of the field for commercial speculation, apparently unfettered by any serious obstacle to the accomplishment of their golden

dreams, combined with a certain degree of exemption from those fatal maladies of the opposite continent, easily overbalanced every propitiatory sacrifice offered to avert the doom of its elder competitor, and to prevent in future any possibility of rivalry, the abolition of the commercial advantages of St. Thomas was imperatively demanded. It is almost needless to remark that it was granted. The sugar plantations were suffered to run waste, the mills destroyed, and the cultivation of other produce was ordered to be restricted within narrower limits. It required no depth of foresight to predict the issue, since the ruin of the island from that date has been progressive, and the selfish policy of its enemies too successfully enforced.

In physical characteristics, St. Thomas uniformly corresponds with those geological formations common throughout this petty archipelago of isles, and which have been prominently displayed in the previous delineation of Fernando Po. The base and mountain declivities are composed of compact masses of basalt, blended in the lower plateaux with fragments of vesicular lava and other vestiges that attest its volcanic origin, the greater portion of which are amalgamated with or encrusted by successive layers of vegetable loam. A curious fact, in connection with this subject, has not escaped the attention of several nautical writers who have visited these islands, viz., that the subterraneous action which has led to the production of these igneous rocks has assumed one particular

direction from N.E. to S. W., the contrary points from which the regular sea breeze and the Harmattan winds proceed, and that a line so drawn from the mountains of Rumby through the stupendous Camaroons, &c., will nearly intersect the whole of them. To the European not familiarized with the prodigal luxuriance of an intertropical vegetation, the first glimpse of the natural scenery of this and the other islands would elicit unequivocal tokens of pleasure and admiration. So far as the eye can reach, one dark and sequestered wilderness of woods extends its sway from the rocky beach to the highest range of peaks, its variegated foliage, under the molten radiance of a fervid sun, exhibiting a variety of gorgeous shades that set descriptions at defiance. A mountainous ridge of unequal elevation passes longitudinally through the centre of the island, having its outline broken into a multitude of grim and fantastic peaks, airy pinnacles, and huge fragments of rock, the impress of the mighty power of those fiery and terrific convulsions now in final repose. The most lofty eminence has been computed to be above seven thousand feet in altitude, and its summit may be descried far at sea above those fleecy clouds that descend and overshadow its forest-clad sides.

The aspect of the country, in proportion as it approaches the confines of the islands materially alters in character, gentle undulations usurping the place of the rugged sierras, while native plantations

and well stocked farms dispersed over its fruitful districts, suffice to tell how far the labour of cultivation has progressed. The mansion and more humble domiciles of the planter and his slaves, environed by the banana, orange, and plaintain trees, the gifts of a torrid soil to its owners, now more frequently glance forth from amid the fertile fields of mandioca, maize, and coffee; and the ruins of deserted mills and casas, half choked and hidden by shrubs and noxious weeds, with gem-like groups of palm and cocoa-nut trees rearing their taper stems above the entangled thickets, still further contribute to the enchantment of the picture.

The town of Santa Anna de Chaves, the capital of the island, is founded at the bottom of a beautiful harbour of the same name, and is the usual place of resort for most vessels that come for the purposes of trade, or for refreshments. The bay of Santa Anna lies on the eastern side of the island, and is defended by a small castellated fort on the southern point of its entrance. Two insignificant islets, one on the north named Ilha de Cabras, or Cabreta Island, and the other to the south of the bay, called the Isle St. Anna, are the distinguishing landmarks to those ignorant of the passage to the port. The town, although of moderate dimensions, affords at present but faint traces of its early opulence and grandeur. Its decorated churches, stately edifices, and other architectural structures, have silently disappeared during the lapse of years, and all the monuments of its bye-

gone prosperity are confined to a few stone houses, whose mouldering exteriors perfectly harmonize with the prospects and fortunes of their later and less wealthy occupiers. Great numbers, however, of wooden houses and native huts tend to the enlargement if not to the ornament of the town, and bestow a cheerful air over the whole, for in each court-yard are planted cocoa-nut, palm, and other splendid trees of indigenous growth, which, upon their arrival at maturity, radiate their feather-like branches around, and not only embellish the precincts of the place, but add essentially to the ease and comfort of their inhabitants by the luxurious coolness their umbrageous canopy diffuses to those located within their shade. The population principally consists of negroes brought from the adjoining continent, mingled with mulattoes and other dusky grades that betoken some approach to European consanguinity. It embraces but few whites. The average number of human beings in St. Thomas may be estimated as below twelve thousand.

The country in the vicinity of St. Anna de Chaves bears convincing proofs of the exuberant fertility of the soil, and the carpet of verdure, enamelled by the exquisite bloom of countless plants, truly announces with what a munificent hand nature has distributed her treasures in the favored localities of these sunny islands. The edible fruits and vegetables reared in the vicinity of the town are chiefly those which custom and a long

established requisition has plentifully called into cultivation. It is, therefore, in conformity with these objects that the Mandioca or sweet cassada is so universally planted for the manufacture of farina, inasmuch as it not only supplies their domestic wants, but is a valuable article of commerce. Independent of the slave ships that usually touch at the island to procure a sufficient quantity of it for the subsistence of their living freights, it is likewise transmitted to the other Portuguese possessions in southern Africa, where, from the aridity of the land and dearth of rain, its production is often a matter of difficulty. As a portion of the diet of the convalescent, farina, when properly made from the *Jatropha Janipha* is a very nutritious and digestible edible, and may be administered in those cases where it is agreeable to the palate; but some caution should be taken that the bitter or poisonous cassada *Jatropha Manihot* has not been the plant from which it has been prepared, since its exhibition has not unfrequently been followed by serious consequences. The African bean, or callavancy, is another useful product, held in much request by the foreign shipping, and is generally purchased to promote the health of the crews.

Limes, melons, oranges, yams, plaintains, sweet potatoes, cabbages, pine-apples, papaws, maize, peppers, and, indeed, nearly all the vegetable esculents found in Western Africa, are readily bartered for old and worn out apparel in preference

to either money or spirits, and this mode of payment equally applies to the islands of Princes and Anno Bona, the natives of which are always desirous of receiving such habiliments in exchange for their produce, which is, perhaps, more in consonance with their taste and vanity for dress. Beef, pork, mutton, goats, poultry, turtle, and fish, may be found more or less in the market, the price of the former being regulated by the quantity required by the vessel; it, however, cannot be procured at the same moderate rates demanded in other parts of the Bights.

Another small harbour, known as Man of War Bay, is situated more to the northward of St. Anna de Chaves, and is not much visited unless by small vessels, since the bay is so shallow that those of large tonnage are obliged to anchor outside. Favorable accounts have been given of the facilities which it affords for the supply of wood and excellent fresh water, and with less drawbacks than at the preceding port, where they are not so easy of attainment. With the exception of beef and some minor deficiencies, all the fresh provisions may be obtained here as in other districts of the island. The most conspicuous marks by which the port may be known, are the "Misericordia Chapel," founded on the crest of an adjacent hill, and the white exterior of Fernandilla House, so entitled from the estate of which it constitutes a portion. At a few hundred yards to the eastward of the latter is the watering place for the shipping.

The town resembles others of Portuguese construction, and is fully as dirty.

Separated by a channel two miles in width to the southward of St. Thomas is the small rocky islet denominated *Ilha da Rolas*. It is densely wooded, and abounds with different species of game, which may furnish occasional pastime for the visitor. From the few natives that live upon the isle, fresh stock, such as pigs, poultry, &c., with turtle and fish, may be procured to a limited extent; and although wood is plentiful, no water exists, inasmuch as it has to be brought from the opposite island. The western extremity of *Ilha de Rolas* is directly under the equator, hydrographical writers placing it in longitude $6^{\circ} 36' 30''$ E. Five miles to the westward of it may be noticed the Seven Stones, a reef of rocks of some elevation above the waters of the ocean.

According to opinions of modern origin, St. Thomas may claim higher pretensions to healthiness than either the wild and primeval solitudes of the adjacent continent, or the less genial woodlands of its kindred neighbour, Princes. There can be no question as to its superiority over the localities situated on the African coast, its insular position, greater distance seaward, more frequent breezes and other climatorial advantages, would render it a work of supererogation to carry on the comparison further; but when these reports place on a par with those settlements on the coast the island of Princes, and thereby admit its

inferiority to the present isle, they require to be thoroughly investigated, since they appear to be based on such indefinite data, and are enforced by such hypothetical reasonings, that the soundness and propriety of them may well be mooted. My limited space will only permit me to allude to the scientific researches of a lucid writer, Colonel Sabine, R.A., who, in his essay on the African currents, has endeavoured to indicate their supposed effects upon the climates of those islands with which they are in proximity. He remarks, "That it has been shown that the water of the equatorial current is from ten to twelve degrees colder than that of the coast of Guinea, and that its northern border, which at other seasons passes the meridian of St. Thomas, at the distance of from one hundred and twenty to one hundred and eighty miles south of its southern extremity, was found in June in contact, or very nearly so, with the island itself; and it is not improbable from the consideration of the causes which occasions its advance towards the equator when the sun is in its northern signs, that in July it may extend so far as even to include the whole island of St. Thomas within its limits."—"The comparative unhealthiness of Princes Island to that of St. Thomas, and of both to Anno Bon, as the residence of Europeans, has been frequently and particularly noticed by Portuguese authorities, and is universally recognized at Princes Island and St. Thomas. It may be a sufficient explanation to

remark that Anno Bon is surrounded by the equatorial current, Princes always by the Guinea current, and that the position of St. Thomas is intermediate, and its climate is occasionally influenced by both. In tropical climates, a very few degrees of temperature constitute an essential difference in the feelings of the natives and in the health of Europeans."

To the proposition, so far as it extends to an alteration of atmospheric temperature, originating from a greater or less coolness of the oceanic surface, and the beneficial change that would consequently ensue from the depression or reduction of those calorific influences peculiar to unhealthy tropical climes, I cordially assent, but with the reservation, that the operation of these agencies be of permanent duration. Now the equatorial current regularly approaches the northward in proportion as the rains advance, and again recedes to the south precisely as the sun returns; its continuance, therefore, in the vicinity of St. Thomas is solely confined to the rainy months, which in the Bights, apart from all maritime considerations, are the most healthy periods of the year to Europeans. The valid objection which may be urged against the beneficial effects of the current in influencing the general salubrity of the island, is the limitation of its accession for a fixed period, and its prevalence when least required. If the equatorial current prove of any utility, it should be in those seasons the most pernicious to the health of the white resident, viz.,

the latter end of August, in September, October, and November, the sickly months of the Bights of Benin and Biafra, and also of the islands located within their boundaries; for, as I have elsewhere stated, it will then have passed far to the southward, and cannot exercise the slightest control. St. Thomas may, in all probability, at this time, be surrounded by the Guinea current, the same as Princes Isle, and will be equally liable to the same changes and mutations of weather as affect it. The only difference is that of situation, the former being a little more than two degrees to the westward, a difference barely perceptible, if we consider it in relation to the creation or prevalence of endemic affections. In Africa there are invariably certain periodic visitations of sickness, dependent on natural causes, and on peculiarities of physical conformation in the human race. Thus the two healthy seasons for Europeans in western equatorial Africa are most unfavorable to the health of the negroes, and, *vice versa*; hence the necessity of studying these climateric variations in a more comprehensive point of view. Alternations of temperature and of seasons have, from primitive experience, been specially pointed out as the most prolific sources of disease in most of the countries of the globe; if then such are the general causes of ill-health in temperate climates, with what fearful potency will they be endowed in regions more hostile to the European constitution. Colonel Sabine is, perhaps, not aware that implicit credit is seldom placed

on the representations of the Portuguese authorities in these islands, particularly when they refer to the merits of their respective salubrity. Those who, like myself, have passed many years on the African coast, know that mercantile interests, like the secret state machinery, require a cautious and subtle policy in their management, and that in numerous instances there is no moral engine which exerts such a dominant influence in undermining the reputation of any colony, and deterring the inexperienced visitor or competitor from residing in it, as the withering fear of death. The hecatombs of human victims, sacrificed on the altars of a destructive climate, not only confirm the terrors of the timid, but tend to establish the truth of the report. It is, therefore, not a rare event for the population of one place to question or deny the healthiness of another, as best suits their purpose, and I need only cite, as an example, two of our northern settlements in western Africa, the rival colonists of which, although half of them occasionally perish in an unhealthy season, yet each stoutly maintains the superior salubrity of their own locality over that of the other. Their contentions, in this respect, are a bitter burlesque on European life in Africa.

The diseases to which the white inhabitants of St. Thomas are subject, do not present sufficient pathognomonic variations to separate them from the same class which pervades the marshy deltas and the banks of the more accessible rivers on the

coast. In the latter localities, however, the greater prevalence of fevers more adynamic in their type, and less tractable in their cure, may be said to constitute the line of demarcation, so far as it is perceptible. Simple remittent fevers, mild and brief in their course, with quotidian and quartan intermittents and other ephemeral febrile affections, seldom demanding active measures, comprize the lighter class of maladies which trouble the Portuguese. Bilious and congestive remittents of an asthenic or inflammatory character, complicated with cerebral, gastro-enteritic, and other visceral derangements, among which may be included those graver continental affections, generally of a less successful issue, form those of the most serious class. Organic lesions of the liver and spleen, and that most intractable and fatal of all African diseases, dysentery, are often met with. Enlargement and hepatization of the spleen, being one of the more constant sequelæ of remittents, and other febrile diseases, are not rare.

The morbid affections incidental to the negro population are, in the majority of cases, restricted to the cutaneous structures, although congestion and inflammation of the deeper seated cavities are of equal frequency in the cold rainy months.

Lepra, scabies, pneumonia, pleuritis, diarrhœa, tenia, and, in fact, a host of African disorders may be noticed among them, under every form and grade, from the merciless phlegdenic ulcer to the more protracted pulmonic abscess, the exemplary

patience, fortitude, and resignation of these unhappy beings under their afflictions being such as to excite feelings of deep commiseration and regret. Recently, I am informed, the Portuguese government has determined to appoint a greater number of medical officers, so that these cases of prolonged misery will, I trust, become less public. The suppression of the slave trade, however, has had one good effect, viz., that of compelling a more attentive consideration to the medical wants of their surviving slaves.

THE ISLAND OF ANNO BONA.

ANNO BON, or Anno Bona, the most southerly of this group of islands, was first discovered about the year 1498, and derives its title from being first observed on a new year's day; hence, under such propitious auspices, the application of the term, which implies a good or prosperous year.

It is of a conical shape, seven miles in length, and from twenty-five to thirty miles in circumference, its acclivities gradually converging upwards from their base, until they terminate in a few crests or peaks. Lying in latitude $1^{\circ} 25'$ South, and in longitude $5^{\circ} 42'$ E., it is somewhat out of the track of the homeward-bound palm-oil ships which usually pass to the northward of the equator; a stray man-of-war, and the merchant vessels that trade to the southern coast of Africa, being its chief visitors. The town is erected on the verge

of a narrow strip of white sand, that constitutes the outer boundary of a small bay on the north-east side, a grove of cocoa-nut, banana, and other ornamental trees, that intermingle among the dwellings, concealing the greater number of them, a part of the suburbs being alone visible. The bright and gaudy foliage of this wooded screen, enriched by the gay and brilliant flowers of innumerable creepers, whose snake-like convolutions, passing from branch to branch, in withes and pendent festoons of delicate blooms, throw an indescribable charm over the whole place. Anno Bon contains no white inhabitants, its population being exclusively negroes, the residue of a slave cargo, who are said to have first colonized the island, the vessel conveying them to the coast of Brazil having been wrecked on the reef of rocks projecting from it. Although still a degraded race, rude in manners, and but little civilized by their intercourse with Europeans, they are esteemed as a kind, inoffensive, and hospitable people, and bear a good reputation among African traders. The number of inhabitants does not exceed eight hundred, of which nearly two-thirds are resident in the town, whilst the others live in scattered hamlets in various districts of the isle. They are well supplied with poultry, goats, pigs, &c., but their chief subsistence is derived from fishing, at which they are very expert, the banks and rocky inlets which begirt the land yielding them ample opportunities for the employment of their piscatory skill. Among

the finny tribes often brought for sale, may be enumerated numerous flying fish of a large size, snappers, red groupers, rock-fish, and other kinds of fish highly valued for their flavour and rarity in different parts of the world.

The fruits and vegetables peculiar to tropical countries are found here in tolerable abundance, according to the season of the year in which they arrive at maturity; those which may be commonly purchased are tamarinds, oranges, limes, sweet potatoes, earth nuts, maize, cocoa-nuts, cassada, beans, sugar-canes, peppers, bananas, plaintains, and pomegranates.

Pure fresh water may be taken from a spring to the southward of the town, but it has been remarked to be rather difficult of access when any surf sets in. On the flat summit of the principal peak, a pond of fresh water exists, filling up what was originally the crater of an active volcano. To the streams that occasionally pour forth down its declivities, from its overflow, with the deposition of rain and heavy dews, may be ascribed the extreme richness of the soil, and the luxuriant vegetation that flourishes in all directions. From the elevation of the land, the attraction and condensation of the cloudy strata are of daily occurrence, and thus the contents of this natural reservoir are never exhausted.

In 1641, the Dutch invaded and took the island from the Portuguese, but after a brief possession it was finally relinquished by them, on account of its inconvenient distance from the coast and its inade-

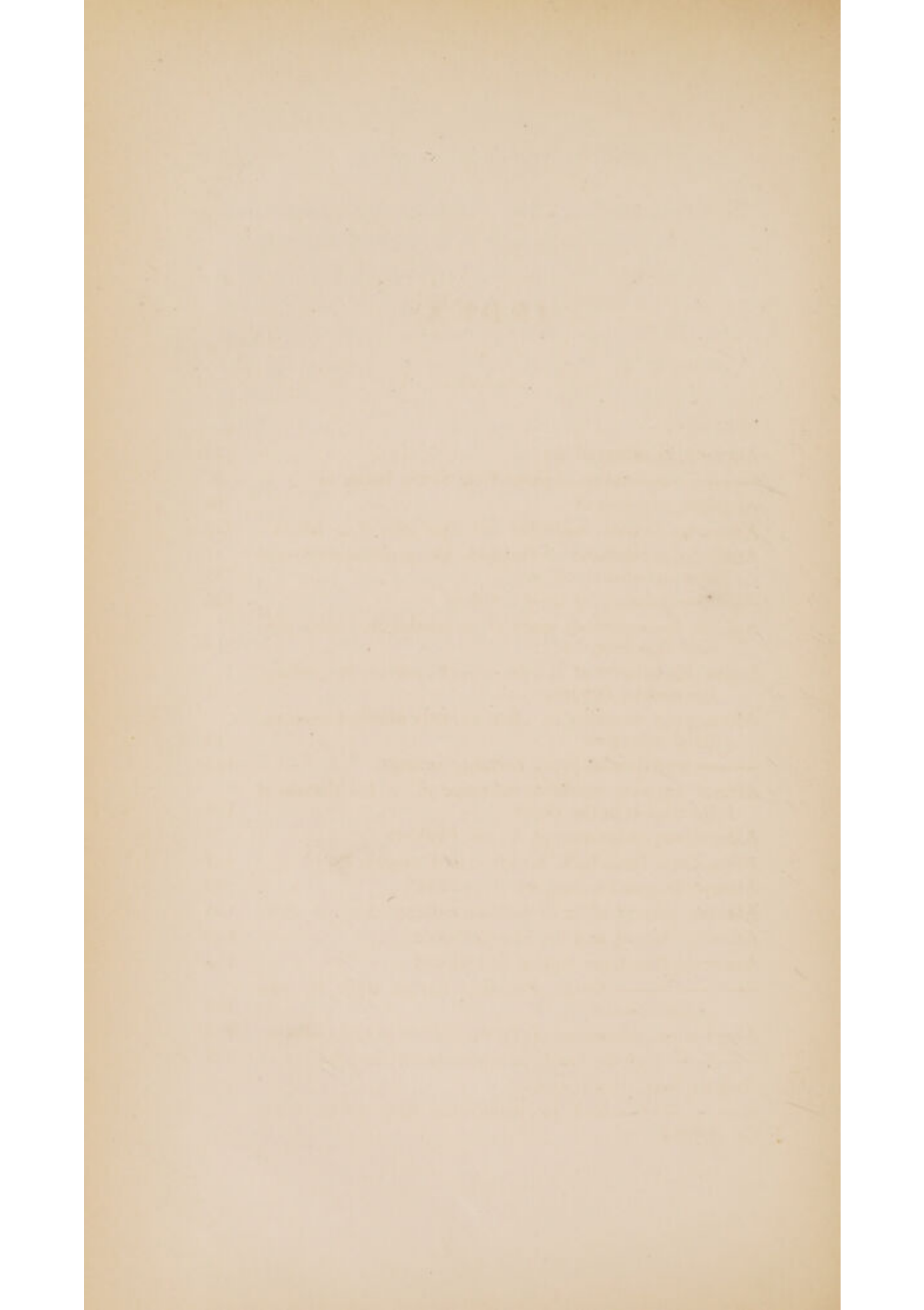
quate resources. It afterwards nominally reverted to the dominion of the crown of Portugal, which made a few faint efforts towards its colonization, but these, like all weak and ill-directed attempts, soon failed from want of the necessary means, and at length the governance of the island fell into the hands of the natives, and at present continues under the presidency of an old chief, who acknowledges himself as the Portuguese viceroy. This island was, however, ceded to Spain in 1778.

Anno Bon has been considered by some European writers (but upon what authority appears to me doubtful), to be the most healthy of all the islands in the Bight of Biafra, and the one best adapted for the restoration of those impaired constitutions, arising either from severe attacks of fever or a long protracted residence in a sickly locality.

Probably a milder and more equable climate, less sultry and oppressive, from the opposing influences of westerly breezes that prevail with others more to the southward during the greater portion of the year, and the less frequency of tornadoes and other violent atmospheric changes, all tend to render it more adapted to the constitutions of the unacclimated, while to those who have experienced all the severity of African disease, its insular climate, and other local advantages, may go far towards the improvement of the health, and the removal of that general debility which mostly ensues after the protracted low remittent fevers of the coast.

Notwithstanding the satisfactory assurances brought forward in favour of its superior salubrity, this island has been stated to produce fevers of a very severe character, but whether they were generated from endemic causes, or from the development of morbid germs contracted in the alluvial flats of the Delta, and thus manifesting themselves from the change of locality and atmosphere, is a matter of mere conjecture.

However, independent of the usual sources of disease, there are doubtless reasons for imagining that under different aspects some unknown peculiarity or prejudicial agency, more or less exists in every country and island in equinoctial Africa, not hitherto detected or even appreciated, and from which Anno Bona is not entirely exempt.



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