

Remarks on the topography and diseases of the Gold Coast / by R. Clarke.

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Publication/Creation

London : Printed by T. Richards, 1860.

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REMARKS

ON THE

TOPOGRAPHY AND DISEASES OF THE
GOLD COAST.

by R. Clarke.

London:

*Printed by T. Richards of Queen St.
1868.*

From the author.

REMARKS ON THE TOPOGRAPHY AND DISEASES OF THE GOLD COAST.*

By R. CLARKE, Esq., late of H.M. Colonial Medical Service; and formerly
Acting Judicial Assessor of the Gold Coast.

[*Read before the Epidemiological Society, Monday, May 7th, 1860.*]

BEFORE entering upon the immediate subject of this paper, I shall endeavour to give an outline of the general divisions of the Gold Coast, and the races inhabiting it. The Gold Coast is divided into the two great divisions of the Leeward or Eastern Districts, and the Windward or Western Districts; the Secoom, a small river, some eight miles from Accra, being the boundary line between them.

The British forts and villages along the seaboard are situated at irregular distances, from Cape Appollonia on the west, to the river Volta on the east, an extent of about two hundred and forty miles, and lying between $4^{\circ} 40'$ and $5^{\circ} 40'$ of north latitude, and from the meridian to about 3° of west longitude. Addah, Quitta Fort (lately abandoned), Ningo, Pram Pram, Pony, Temma, Teshi, Labadee, Christianborgh Castle, and James Fort, British Accra, are within the former or Leeward division; while Appollonia, Dixcove Fort, British Secundee, and Commendah, Cape Coast Castle, Animaboo Fort, Coromantine, Mumford, Tantanquerry, and Winnebah, are included in the latter or Windward division. Besides these towns and larger villages, there are numerous hamlets along this line of sea coast, which it is here unnecessary to note.

But, from the fact of the forts and stations belonging to the British and Dutch governments closely intersecting each other at short distances between Appollonia and Accra, great and almost insurmountable difficulties are constantly arising between the two governments. At Accra their proximity is strikingly illustrated, British Accra being only separated from Dutch Accra by an imaginary line; the people of these towns being, moreover, bound together by the ties of blood, language, laws, and customs. As an example of the difficulties just alluded to, I may here instance the fact that the imposition of a fixed duty of two per cent. upon the invoice price of all imports into British waters on the Gold Coast has been a source of discontent to the British mercantile community, because they have to compete with the merchants of the neighbouring Dutch towns, who pay no duty, and

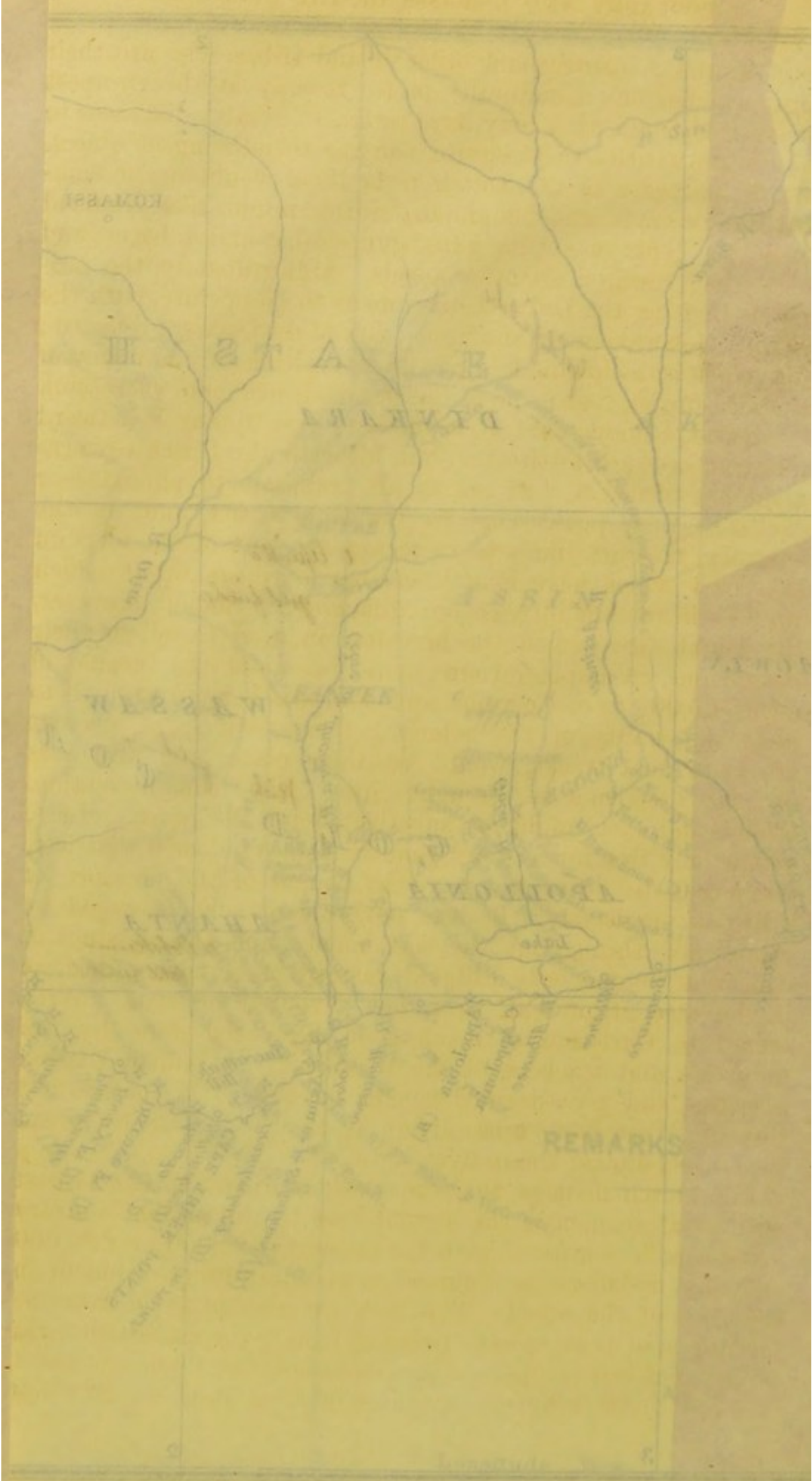
* A large portion of this paper has been published in part 4 of the *Parliamentary Reports of Her Majesty's Colonial Possessions* issued July 1861. R.C.



Map to illustrate
REMARKS ON THE MEDICAL TOPOGRAPHY
OF THE
"GOLD COAST."

ABBREVIATIONS. { British (B)
Dutch (D)

Longitude West 0 Longitude East



KOMASSI

WEST
DYARRA

WASSAR

APOLLONIA

Lake

REMARKS

St. Nicholas
St. George
St. Peter
St. Paul
St. Andrew
St. John
St. James
St. Philip
St. Bartholomew
St. Thomas
St. Matthew
St. Mark
St. Luke
St. Stephen
St. Proculus
St. Pothimus
St. Simplician
St. Nereus
St. Marcellin
St. Peter ad Vincula
St. Paul ad Vincula
St. Andrew ad Vincula
St. John ad Vincula
St. James ad Vincula
St. Philip ad Vincula
St. Bartholomew ad Vincula
St. Thomas ad Vincula
St. Matthew ad Vincula
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St. Luke ad Vincula
St. Stephen ad Vincula
St. Proculus ad Vincula
St. Pothimus ad Vincula
St. Simplician ad Vincula
St. Nereus ad Vincula
St. Marcellin ad Vincula

because the Ashantees and other inland tribes, who are their principal customers, naturally prefer to buy at the cheapest market, although they may have to travel greater distances to obtain the articles they require, time to them being no object. By the purchase of the Dutch forts there would be no competitors in trade, and the import duties might then be fixed at 25 per cent. on spirits, guns, gunpowder, and tobacco, and of ten per cent. on all other goods. Unfortunately, the proposals inviting the Dutch Government to co-operate with the British Government in the imposition of duties were rejected; nevertheless, a clear and impartial exposition of the policy of the measure may, at some future period, prove more successful. Overtures, I understand, were made to give up our Windward for their Leeward territories; but, hitherto, the Dutch Government has turned a deaf ear to all proposals to purchase or exchange their possessions on the Gold Coast, and, on the contrary, they are likely to re-occupy the rest of the forts on the coast, which have long been abandoned, an event which would still further increase our difficulties. Should, however, the Dutch Government be hereafter induced to sell us their possessions, an ample revenue could be raised, the income of about £5,000 from Customs and Poll-tax being too small to meet the wants of the colony. Roads, which at present are mere goat tracks, would be then made, and all parts of the settlements brought into easy communication. Camels and oxen might be substituted for the horse and ass, which only live for a short time in the Windward districts, while each district would have the benefit of the presence of a British magistrate. Besides, government schools would be established throughout the settlements, and the blessings of education be generally diffused, instead of being confined, as is the case at present, to a few favoured districts. With regard to Christianity, much good has been done by the ministers and teachers of the Wesleyan and Danish Mission Societies, and my esteemed friends the Rev. C. S. Hassels and Rev. W. West, were unremitting in their exertions to spread the Gospel among the natives.

The Dutch manage their possessions upon the Gold Coast with great economy; the annual cost to the mother country being a trifle compared with the amount, £24,000 or £30,000 annually, disbursed by England to maintain its government in that part of the world. This they are enabled to do from the territories of both nations being so closely interlaced, that the presence of our troops, and squadron cruising upon the coast, exerts a moral influence so powerful that it is sensibly felt

and alike acknowledged by the subjects of both countries. Therefore a militia force of ~~one~~^{two} hundred well-disciplined and armed men, clothed in a uniform made of the cheap fabric called "blue baft," commanded and drilled by two military officers, assisted as circumstances may require by the gentlemen of the civil department, is found by the Dutch sufficient to support their authority, and to repress revolt.

The British forts are garrisoned by 300 men of the Gold Coast Artillery Corps,* commanded by seventeen European officers. The soldiers are chiefly composed of runaway slaves, but discipline and their elevation from serfs to freemen soon enable them to appreciate their improved condition. When claimed by their owners (a circumstance which is constantly occurring), an arrangement is made to indemnify them and redeem the slave by the payment of £8 sterling, that sum being deducted by instalments from the man's pay. The troops are clothed in a modification of the Zouave uniform, and are armed with the short Enfield carbine. The officers have the privilege of holding civil appointments, which they were led to expect when the corps was formed. Moreover, promotion is so rapid (not so much from death vacancies as from officers retiring or being transferred to other regiments of the line) that the rank of captain is attained after a period of three years full service dating from the time a lieutenancy is obtained. Three and a half-years is the average period of service upon the Gold Coast before attaining the rank of captain, when, if they choose to retire, they become entitled to a pension of £150 per annum. Commissariat officers serve two years in the colonies of West Africa, and their pay while stationed there has been lately augmented, and additional leave of absence is granted them when they return to Europe to recruit their health. The officers of the medical staff serve one year in West Africa, and that period is reckoned as two.

The only civil force which the Government at present possess consists of about twenty-five militia men. These men are employed as messengers, but their number is altogether inadequate as a police force for the vast extent of the Protectorate. To each court of justice a paid constable is attached, the other members of this force depending upon fees paid them for serving summonses, &c. These men while thus employed frequently commit acts of extortion, or take bribes from the more unsophisticated inhabitants of the rural districts, and so largely increase their emoluments by playing

* The regiment is further increased by a band, and supernumeraries of about fifty men.

upon the hopes and fears of the parties to actions about to be tried. For I may here remark that the inhabitants of the Gold Coast are an exceedingly litigious people, disputes about the right to lands being especially a subject of contention since palm oil has become an article of such large export from the coast.

With few exceptions, nearly all the people of the protected territory may fairly be set down as consisting of two races, differing from each other not only in language, but in many of their customs and laws. Within the protected territory, the Oji is spoken by the Fantees on the coast, and by the Assins, Wassaws, Dinkerras, and others in the interior. In the Leeward districts it is not the language of the coast towns; but it is spoken by the Akims, Aquamboes, and Aquapims in the interior. The purest type of the Oji is the Ashantee, the Fanti differing greatly from it. The Akims, Assins, and Aquamboes, speak almost pure Ashanti; nevertheless, they, with the Fantees, understand each other. Not a very long time ago, these tribes were subject to the King of Ashantee, and their territory was part of his kingdom. The Accra language is chiefly spoken by the Accras of Jamestown, Dutch Accra, and the people inhabiting the adjoining country; but the Croboes, who occupy the inland region about sixty miles from Accra, speak a dialect of Accra known as the Adempi tongue.

COURSE OF THE SEASONS.—The seasons of the Gold Coast, as in all other tropical climates, may be divided into wet and dry. There are, however, two rainy seasons in the year; one begins about the end of May, and diminishes in September, when there is generally an interval until the end of October; but this last hardly merits the name of a wet season compared with the quantity of rain which falls in the former period. Towards the end of July, the heavy rains are considered at an end, and shortly after, the fogs or "smokes" set in. This is by far the most unhealthy period of the year. The fogs continue for several weeks, but are generally over about the 14th or 18th of August. The dry season sets in in November, and continues, with trifling variations, throughout the remainder of the year, and until the following month of May. Tornadoes commence in March, and continue about two months. About the middle or end of December, the Harmattan winds blow, a haze accompanying it. It blows at any hour of the day, time of the tide, or period of the moon. On the Gold Coast, this wind blows from the North-east, or from the E.N.E., and generally prevails in December, January, and February. The sun is obscured the greater part of the day, and is often only visible for a few hours about mid-day, when it appears of a deep red, causing no unpleasant sensations in the eye. The moon, which

shines so brilliantly in this climate, is also obscured, and few stars can be distinctly seen. The eyes, nostrils, lips, and palate become dry and uneasy; and when the Harmattan continues four or five days, the outer cuticle often peels off from the hands and face, and should it prevail longer, other portions of the skin are similarly affected. It exposes defects in furniture, and contracts wooden flooring so much that light is freely admitted through the seams, and sounds from above or below may be heard with greater distinctness. Neither dew nor moisture can be detected. The country at this season of the year has a wintry aspect, and the aridity of the soil is so great that the earth splits and cracks open, and when walked upon conveys the ringing sound so perceptible in clear frosty weather. The branches of the orange and lime trees droop, and the leaves become flaccid and wither. The grass is dry, withered, and brittle, and the natives take this opportunity to set it and the jungle on fire. Water is rendered deliciously cool—so cold, indeed, that in some persons it causes a momentary aching in the teeth. The climate of the Gold Coast may, however, in my opinion, be favourably contrasted with that of Sierra Leone in several vital points. In the former, the type of the remittent fever of the country is generally mild, of short duration, and rarely proves fatal to European life; in the latter, on the contrary, the seasoning fevers are prolonged, intractable, and too often terminate in death. Then again, the epidemic, or yellow fever, which, at uncertain intervals, scourges the colonies of Sierra Leone and the Gambia, is wholly unknown on this coast. The atmosphere of the Gold Coast is, moreover, drier; the alternations of temperature neither so great nor sudden; and the electrical balance, if I may so express myself, is less liable to sudden disturbance. The mean fall of rain at the usual season is very much less than at Sierra Leone. The quantity of rain which falls during the year, it has been stated, averages from eighty to a hundred inches. The nights during the rains are cool and pleasant; but the natives, at this season of the year, suffer a good deal from catarrhs, pulmonary, and rheumatic affections. During part of the rains, thick fogs prevail, and this dense vapour renders the atmosphere hazy, descending in the evening in the form of a dew, so heavy that it penetrates the wooden flooring to such an extent that the boards look as if just washed, and it hangs upon the jalousies of the inner doors of the house like great rain-drops. The fogs on the Gold Coast, and on the coast generally, are called "smokes." More rain falls on an average in the interior of the country than on the seaboard; and this, in my opinion,

does not arise from the land in the interior being more elevated than on the sea-coast, but it appears to depend upon the large tracts of land covered with lofty trees attracting and arresting the clouds surcharged with moisture; for in the vicinity of the sea-coast towns, the large trees having been cut down, there is merely copsewood, densely matted by climbing plants,—a circumstance which undoubtedly has greatly contributed to make these towns much more unhealthy than they would otherwise be had the forest trees in their neighbourhood been judiciously thinned, and not indiscriminately cleared away; for trees, it is well known, exercise a most salutary influence on the health of the inhabitants of malarious countries by screening off, and greatly modifying, that most subtle poison. The felling of the trees has likewise had the bad effect of greatly increasing the price of firewood in the coast towns, which indirectly injures the health of the poorer classes by preventing them from easily obtaining supplies of fuel for warmth and cooking purposes.

The seasons are well defined; the wet weather rarely encroaches on the boundaries of the dry, and the average variation of the temperature is 68° and 87° Fahrenheit between the coldest time of the night and the hottest time of the day. The Harmattan winds, so far from being injurious to life, are, in my opinion, very salubrious, and are much enjoyed by many Europeans who have lived long on the coast, as they find these winds very bracing; but persons recently arrived, on the contrary, generally find that they cause a dryness of the skin, and corresponding temporary functional disturbance of the liver. I observed that its effects were most beneficially felt by persons who had previously been suffering from dysentery, remittent or intermittent fevers, and that they then more quickly recovered. The heat of the climate on the Gold Coast is sensibly moderated by the sea-breezes, which blow at all seasons; and the heat is less oppressive and less felt than at Sierra Leone, where it is checked by the land-locked, mountainous amphitheatres which border its shores and rivers; but the filth of the coast towns, the badness of the water, sameness of food, and proximity of the forts to the sea, are evident causes of its apparent unhealthiness. The interior of many parts of the country, especially about Crobo, Pram Pram, the Abra country, and elsewhere, are far more healthy than the seaboard, and more conducive to European life. Fortunately, annoyance from that pest of other tropical regions, mosquitoes, is little experienced—a matter of no small consequence to the European residents on the Gold Coast.

The winds blow with regularity and mildness; the land-winds, which blow from the N. and N.N.W., and the sea-breeze, which blows from the S.W. and W.S.W., prevail, with slight interruption, throughout the year. The sea-breeze commences about nine or ten in the morning, declining about six in the evening; it ceases about eight or ten, when it is succeeded by the land-wind, which blows until six or eight in the morning. The sea-breeze, at the full and change of the moon, blows with greater force, and it is at all times stronger than the land-wind. The sea-breeze is very refreshing; but the salubrity of the land-wind depends on the condition of the country over which it blows; for it becomes vitiated when it blows over jungles and swampy lands, but otherwise it is health-giving.

I may here observe that I have remarked that men advanced in life, and who had never been before in tropical climates, have a far better chance of living upon the Gold Coast, everything else being in other respects equal, than at Sierra Leone or the Gambia. Aged Europeans settling at either of these colonies incur an enormous risk. On the Gold Coast, they, on the contrary, generally enjoy good health, and are able to perform their several duties efficiently. At the same time, I acknowledge that the colonies of Sierra Leone and the Gambia enjoy great advantages in having good roads and markets, both of which are wanting on the Gold Coast.

The Gold Coast has no navigable rivers of easy access with the interior of the country; and this circumstance, combined with the terrific surf which washes its shores, and the want of roads, are causes which hitherto have greatly retarded its civilization. The present mode of travelling by hammock being very expensive, so much so that a journey of some ten miles costs nearly as much as to travel by third class train from London to Aberdeen. But, although the rivers upon the Gold Coast are unapproachable from the sea, on account of shifting sand banks, shoaling of the water, and bars at their mouths, they are nevertheless capable of carrying on an extensive inland navigation with the greatest benefit to the people. The rivers upon the Windward coast, westward of Cape Palmas, flow from the eastward; whereas those on the Gold Coast flow from the northward, or nearly at right angles. The principal river in the Leeward district is the Volta, which is about a mile in breadth, and runs nearly north-west and south-east, separating the Aquapim from the Aquamboe country, and is supposed to be a branch of the river Tando or Prah, which is crossed by the Ashantees on their way to the coast. The surf at the entrance of the Volta renders it

exceedingly dangerous and difficult for small vessels, boats, or canoes to enter it—a difficulty which is greatly increased during the rains. It is navigable for small craft nearly to Aquamboe; about a hundred miles distant from the sea, further ingress becoming impossible, even, for small canoes, in consequence of rocks and small cataracts obstructing and barring up its channel. The largest river in the Windward division is the Bossim Prah, which empties itself at the village of Chumah. Its banks are clothed with magnificent timber trees, and the river flows through fertile plains; but its entrance is obstructed by rocks and sand banks. It is a branch of the river Prah, the natural boundary which separates the protectorate from the kingdom of Ashantee. The Chumahs have added the word Bossim, to signify that the river is sacred or Fetish. The Iensuh river, near Winnebah, is likewise a large and important stream, having numerous branches, traversing the Agoona district, and penetrating far into the Akim country. Several of the rivers, as the Berrim and Sweet rivers, become small streams as they enter the sea. The Amissah, to the east of Anamaboe, is unapproachable from the sea; while the Naqua, further east, terminates in a *cul de sac* at a village of the same name.

I now beg briefly to describe Cape Coast Castle, the chief seat of the British government on the Gold Coast. It is situated in lat. $5^{\circ} 6'$ north, and long. $1^{\circ} 5'$ west. It was built by the Portuguese in 1612, but was seized by the Dutch some years after, and they held it until 1672, when the English took possession of it, and have held it ever since. The fortress stands upon a rocky promontory, some eighteen or twenty feet above the level of the sea, the reef jutting a considerable distance into it, and opposing an admirable breastwork to its inroads towards the south and west. In stormy weather the southern front of the castle sustains the enormous force of the heavy rollers which are dashed against it, the sea striking the rocks and batteries with so much force that the spray is swept over the latter, and even up to the mess-room windows, some forty feet above the level of the ocean. The noise of the billows, as they advance with amazing velocity to the shore, is deafening, and when they strike the rocks the shock is sensibly felt throughout the castle buildings.

The rock upon which the castle stands is composed chiefly of a very hard reddish grey gneiss micaceous slate, patches of feldspar, granite and quartz cropping out over its surface, as if forced upwards while in a state of fusion. The castle may be described as an irregular four-sided building with bastions at

each angle, having mounted on its batteries sixty or seventy pieces of ordnance. An imposing range of buildings three stories high extends from the north to the south angle, dividing the fort into two unequal parts. In front of these buildings there is a large triangular space, used as a parade and drilling ground for the troops, which is also the last resting place of the poetess L. E. L., and her husband, Governor McLean. In a smaller triangular area behind them, and which is commonly called the spur battery, some of the troops are lodged in casemates on its south side, those on its north side being used as quartermaster's, ordnance, and officers' stores, its centre being occupied by a guard-room built over one of the best tanks in the garrison. The accommodation, however, is altogether too limited, the civil and military officers being cramped for room, the troops being occasionally subject to dangerous overcrowding. Since its resumption by the government, several of the castle buildings have been enlarged ; but there is still a wide field for further improvement. Orders have, I am, however, glad to state, been lately issued to convert the chapel, situated in the upper wing of the northern buildings, into officers' quarters, as strongly recommended by the commissioners, in their sanitary report, under date 30th June, 1857. The suite of apartments on the upper story of the central building, occupied by the governor, and likewise the officers' quarters, in the northern wing of the castle, are well situated and healthy. The garrison hospital is situated on the basement of the northern wing of the castle, and is tolerably well ventilated, lighted, and paved. The dungeons of the castle are revolting records of the purposes for which the fortress was originally designed. It was in these dismal recesses that the slaves were immured until they could be conveniently shipped off. They are under the south or sea battery, and access to them is obtained through a winding archway which opens into crypts formed by the divisional supporting walls of the battery, being feebly lighted and ventilated through grated apertures in the sea wall, which reeks with dankness from the percolation of water. The air is close and offensive.

In the vicinity of Cape Coast, a low undulating hilly range encloses it in an amphitheatre of irregular form ; the chain of hills, sweeping in a convex semicircle, takes a north-east and westerly direction to within a quarter of a mile to the east, and about a mile to the west of the castle. Beyond the hills, near the sea, are valleys of inconsiderable extent ; their highest peaks do not exceed three hundred feet in height above the level of the sea, while their average height is about a hundred and seventy feet. Their peaks and declivities are densely

covered with copsewood interspersed with a few cocoa-nut trees, the elais Guineaensis, fan and date palms, with forest trees. In the lower grounds cleared patches occur, sparsely covered with a grassy sward, and dotted over with clumps of trees; but the land under cultivation bears so very small a proportion to that lying waste, which prevails to such an extent, that the former is the exception, and the latter the rule. The bush has, however, been cleared away in different places in the suburbs by industrious persons, chiefly pensioners from the West India regiments, and these spots appear to much advantage when contrasted with the wilderness of jungle left in its primitive unproductiveness.

About a mile from the castle, and to the north-west of it, there is a salt lake upwards of a mile in length, and half that distance in breadth. It is below the level of the ocean, from which it is separated by a belt of sand, and is filled with water intensely salt, which percolates from the sea through the intervening mound of sand. In the rainy season, the water falling upon the hills which surround it is drained into the pond, and its volume is still further increased by springs which rise through the spongy reed covered morass at its extremity. When the rains are at their height, the area of the loch is greatly extended, portions of the adjoining land being regularly flooded at that season. There are similar salt ponds in the immediate vicinity of Animaboo, Jamestown Accra, and Christianborgh Castle, from which the people obtain supplies of crab and other fish.

As regards health, the removal of the jungle, and the tillage of the waste lands in the neighbourhood of Cape Coast, would free it from a perpetual source of febrile and dysenteric diseases, which at all times more or less afflict its inhabitants.

The soil differs in different localities. In some places it is siliceous, or composed of a black and fertile loam; while in other situations it is argillaceous, and of a reddish brown colour, through which quartz, mica, and feldspar crop out. A dark hard baked clay is abundantly met with, which is intimately blended with minute spangles of mica, and which is broken up with difficulty and labour. Many of the clays are made into pots, and are in common use throughout the settlements for cooking purposes, for which they are exceedingly well adapted. Very good bricks are also made from them.

In several parts of the country, as Akim, Dinkera, Tueful, and Wassaw, gold-digging is the occupation of large numbers of people, who resort thither from all parts of the settlements. All day and night, nothing is heard but the noise of digging,

grinding, and washing the soil. The pits, at their entrance, are generally two feet in diameter, and vary from forty to fifty feet in depth, according to the distance of the auriferous quartz from the surface. The earth is removed with a clay pot, attached to a rope, and in this way the hole is deepened, and made large enough to admit of one man working in a squatting position. The excavated earth is divided between the men who work the pit, carry it home, and grind and wash it. The chief of the district is entitled to one-third of the proceeds. From these pits being frequently shored up very imperfectly, and often not at all, masses of earth fall in, burying the miners alive. Apintoe and Essaham are the principal gold fields in Western Wassaw. At the diggings, marketable goods, such as cotton, ^{gold,} rum, gunpowder, etc., are sold at greatly enhanced prices, from the difficulty of their transport, in exchange for gold dust. The yield varies greatly. The metal is procured at some of the "holes" from the auriferous soil, and at others from the crushed quartz. In other districts, it is obtained by washing in the beds of rivers and water-courses after the rains have run off, especially at the base of the hills. At Cape Coast, and along the seaboard, women may be observed washing the sand on the beach, especially after heavy rains. The sweepings of the market-floors are also diligently swept up and washed to recover any gold dust dropped during the day. They carry the earth to the seaside, and, putting it into a wooden bowl, pour upon and mix with it a quantity of salt water. The bowl is then rapidly moved in the hands, with a circular motion, until the lighter particles are washed off, when the weightier portion of the earth is placed in another bowl. The operation is repeated until a bowlfull of the earth is freed of its lighter parts, when a careful examination is made, accompanied with frequent washings, the gold being at length found deposited in the bottom of the vessel, where it is allowed to remain until the whole of the earth is washed away. It is then removed, and dried by the sun or fire. The earnings of these poor women average about 10*d.* sterling daily, but occasionally 2*s.* 6*d.* worth of granular gold rewards their severe toil. To the granules collected on the beach, a fine, black, and apparently metallic, sand is often found adhering. The bulk of the gold exported from this part of the coast comes from Ashantee, and the quantity annually sent to England is estimated at 100,000 ounces. Nothing is at present known of the other metallic and mineral resources of this country; and the discovery of valuable metals in its soil besides gold, remains to incite and reward the labours of

future investigators. At present, palm oil is the staple article of export, and the trade in it is yearly increasing. Ivory, Guinea grains, and copal are also largely exported. Timber trees abound, well suited for ship building and for furniture. Beams of the cocoa-nut tree are in common use, and are valuable, as they resist the white ant. The soil is admirably adapted for cotton and coffee; and I feel satisfied that hereafter both articles will be extensively cultivated, and are destined to become important exports from the Gold Coast.

Having travelled through several parts of the country, I beg to record my impressions; and, first, I would observe the remarkable difference which exists in the general features of the windward and leeward divisions of the Gold Coast, in that by far the greater extent of the former is either clothed with wood or jungle, whereas tracts of the latter (which, however, includes a part of the Winnebah or Agoonah district in the windward division) consists of vast plains, beautifully interspersed with trees and shrubs, and carpeted with grass, and adorned with a variety of flowers. Indeed, the country about Winnebah cannot be exceeded in beauty or variety, presenting the most perfect resemblance to a domain laid out with the utmost art, the elegant clumps of trees which adorn it giving a park-like appearance to the surrounding country. The country about Accra, Christianborgh Castle, and especially extending northward of Pram Pram, and Ningo, is pastoral and luxuriant to a high degree. The air in this open and champaign country is likewise cooler and more invigorating to Europeans than in the windward division, which is extensively wooded. Game is also abundant—hares, deer, antelopes, quail, partridge, bustard, and guinea-fowl stocking it in great numbers. The windward division, on the contrary, is covered to a great extent with tracts of magnificent forest trees and copse, rendered impenetrable by masses of underwood and plants with prickles which grow between the trees and interlace them together. Lianas coil around and festoon many of the trees, frequently crossing one another like network, winding themselves in all directions. These fibrous plants vary in thickness from a thin cord to that of a cable; climbing to the summits of the trees, they stretch to those adjacent, or depending from them swing idly in the wind, the tortuous pathway being alone trodden by the foot of man. Even the charming glades which open up the forests at several points, relieving and delighting the eye, tired of the wearisome sameness of the route, are uninhabited; but many of the villages and hamlets in the rural districts are built in the midst of the forests, sufficient land being cultivated around them to meet the wants of the people. A great differ-

ence is, however, perceptible as to the extent of land cleared and under cultivation in the different parts of the Gold Coast, more land being left fallow some years than in others, when the natives are stimulated to labour by the prospect of a market for their produce; otherwise they, in general, do not care to plant more than is necessary for their wants.

From the opportunities I had of judging, I am led to conclude that the protected territory is sparsely inhabited. Its population has been estimated at 400,000, scattered over a surface of about 8,000 square miles. The people have no manufactures worthy of the name, but may be separated into three classes—agriculturists, traders, and fishermen. Narrow cotton cloths are woven in some districts, and baskets and mats are ingeniously made in others, while they greatly excel in gold work, fashioning elegant and beautifully-designed ornaments of that metal. There are, however, several places along the seaboard where salt is prepared from sea water by natural evaporation in shallow pans; but they likewise obtain it with less trouble by scraping it off as it is formed upon the surface left dry by the evaporation of the water in the salt ponds. Brick-making is also carried on at Cape Coast and Annimaboo. The population has not been diminished by war, pestilence, or famine, for the Croboe revolt last year (1858) may be said to have been put down without bloodshed; nevertheless, the increase of population has not been in any degree commensurate with what might reasonably be expected under such favourable circumstances. To what, then, is the cause ascribable? In my opinion, the chief cause arises from the enormous mortality which continually occurs in infancy from mismanagement by the natives of their young, and by their unskilful medical treatment. Polygamy is another cause which powerfully contributes to this effect, because the habits which it engenders materially diminish the number of births; and, undoubtedly, the easy access to spirits, and its enormous consumption in these settlements, may justly be considered extremely prejudicial to life.

The sanitary condition of the town of Cape Coast, and indeed of all the towns upon the seaboard, is deplorable; notwithstanding that some good has of late been effected by the municipality, yet, strange to relate, no public cloacinæ have as yet been provided to meet the wants of the people, although the subject has been repeatedly taken up, and just as suddenly dropped—the consequence being that decency is constantly outraged, and the most disgusting nuisances are openly committed in the streets. Foul stenches everywhere assail the

nose and corrupt the air, dunghills being attached to the huts, where garbage, filth, stinking fish, and other abominations are thrown. The smells along the byepaths and beach in the neighbourhood of the towns and villages are most offensive from accumulations of human ordure and offal; in fact, the native population is unrestrained by any police rules except at Cape Coast and Accra. In both towns, the municipal corporation have enacted laws for their conservancy; but in reality they are a dead-letter, and hence an amount of nuisance scarcely credible. In the other towns, the Paynims, or native police, utterly neglect important matters of this kind. Indeed, the inhabitants of Cape Coast, and the other towns and villages, are chiefly indebted for their partial cleanliness to those useful scavengers, the Turkey buzzards, largely helped by packs of half-starved, mangy curs and ill-conditioned hogs, who greedily devour the excrementitious matters which are left to rot upon the streets. X A ravine, evidently the bed of a dried-up stream, intersects the eastern portion of the town; the huts of the natives being built upon its banks, rise upwards to the slope above them. This vast surface-sewer is strewed over with animal and vegetable refuse in every stage of decay. It is perforated in a great part of its course by holes which the people dig for water. At the seaside, where it terminates, the surface-water is dammed up by the sand thrown up by the surf on the shore, and is there collected into foetid pools. The thorough cleansing out and bridging over of this gully, at the most convenient points, would materially benefit the health and comfort of the inhabitants of Cape Coast. The municipalities of Cape Coast and Accra being at present without adequate means to effect sanitary improvements, progress in abating nuisances will be of slow growth if unaided by the local government.

The town of Cape Coast is irregularly built; the houses are constructed of clay or bricks, and are generally square. In some of the rural districts they are made of bamboo, wattles being woven between the upright posts, which is then plastered over with clay, which becomes, when dry, remarkably hard. The walls of their dwellings are rarely if ever white-washed, and are often crowded, ill-ventilated, and dirty. Most of the rooms are miserably small, dark, damp, and badly ventilated, especially those devoted to sleep. In their sleeping-places the poorer classes, and many persons in better circumstances, keep all the dirty clothing not in wear, either about their beds or hanging from the wall, scraps of food and putrid fish being strewed about or collected in corners. The lower rooms

X. *The Dutch towns and villages upon the Gold Coast are quite as dirty as those of their English neighbours.*

open into inner courts, where, in fine weather, the members of the several families meet, and where they often cook and eat their food. The houses of many of what may be termed the middling class are well provided with European articles of cabinet furniture, with crockery, glass, and mirrors, while the walls are decorated with cheap prints. Indeed, in many of the houses of the poor, their children paste over the walls with prints from illustrated journals, having quite a passion for this cheap kind of ornament. The wealthy native gentlemen live in well-built houses, commodiously and often elegantly furnished; but few of them have fire-places either in the public rooms or bed-rooms—a want which impairs health in a country exposed to heavy night-dews, and in some wet seasons to heavy falls of rain. The general custom on the Gold Coast is to burn charcoal in clay pots in the public rooms and bed-rooms when the weather is damp or cold. This practice is not without danger, as on one occasion I was called to render aid to a man whom I found had been asphyxiated by the fumes of charcoal to which he was exposed in a close sleeping-room. From inquiries that I have made, I found that twenty may be safely reckoned the average number of tenants living under one roof in the two-storied houses in Cape Coast; and it often happens that sober, decent people dwell in one apartment, and a drunken man in the next; for I regret to say that drunkenness is a wide-spread vice among the natives—a circumstance chiefly dependent upon the cheapness of the spirits imported from the United States and the Brazils. In these houses, the well-conducted are too often pestered and annoyed by their disorderly neighbours, and the most violent altercations frequently occur between the members of the different families. On these occasions they seldom come to blows, but content themselves by heartily abusing one another in the foulest language they can lay tongue to. Such quarrels, although they may commence among the male branches of the family, are almost invariably taken up by the female members, when the men cease their angry recriminations, and listen with much complacency to the scolding of their wives and concubines, the contending women rushing up to each other, gesticulating in the most frantic way, screaming furiously, and vociferating in the loudest tones—each of them, in this war of words, being backed up by mutual friends among the spectators, to whom they constantly appeal to support their vituperations. In this way their children grow up, and become accustomed to the continual recurrence of such scenes, and suffer corresponding neglect; sometimes petted until they become wilful and in-

sufferably perverse; at other times unmercifully beaten, the domestic peace being occasionally disturbed by their mother's cries when tied up and beaten by their fathers with fist, stick, or whip for some connubial fault. In these abodes, the laws which govern health are therefore utterly neglected, all kinds of refuse and filth being allowed to accumulate in and around them. In the rainy season, and especially during the "smokes," or dense foggy weather, the pernicious effect of these local contaminations is more sensibly felt in the spread of dysentery, diarrhoea, remittent and intermittent fevers, and in the prevalence of pulmonary disorders—other exciting causes being also in active operation. Perspiration, for example, is checked by the damp air and vicissitudes of temperature, giving frequently rise to internal congestion, languid circulation in the liver, and functional disturbance of that organ. Nevertheless, some cause other than these must be at work to account for their yearly prevalence and the high rate of mortality; and this, it appears to me, can only be accounted for by the diffusion of a specific poison of a malarious, and partly of a scorbutic nature. X.

I feel convinced that these organs, which bear the first brunt of the vitiated air in their overcrowded and close rooms, soonest suffer. This is the case with the eye and ear, as well as the lungs, and the numbers by whom I was consulted suffering from hæmoptysis, ophthalmia, or otorrhœa, bears out the truth of my assertion. But besides these fertile sources of disease, the poverty of the mass of the people ought to be taken into account in dealing with this subject, because the long train of evils which spring from it are so formidable, that although benevolence may mitigate, it cannot prevent them.

I have before stated, that the houses in Cape Coast (and this remark is equally applicable to the other towns) are so closely connected that a free current of air between them is much impeded; and these narrow spaces and the public highways are further polluted by the surface-drainage, which at present is allowed to escape freely from the houses upon the streets, and still further contributes to the unhealthiness of the town. As each house or hut contains a number of families, the population is condensed, and the extent of the town is correspondingly diminished in size. The population of Cape Coast and suburbs may be fairly estimated at 8,000 persons, including men, women, and children, but in the event of a hostile attack, that number could be further increased by 6,000 men from the adjacent villages. The number is, however, largely aug-

X. The concentration of the specific poison above referred to, is in my opinion one of the causes of the occasional occurrence of yellow fever at S. Leone, and the Gambia. &c.

mented by a fluctuating population who visit it either to trade, to have their political palavers discussed and arranged by the Government, and by the crowds constantly passing to and from towns and villages on the sea-board, and from the rural districts, to the court of the judicial assessor.

There are two badly situated graveyards in Cape Coast, both being in the windward part of the town, one of them being, moreover, surrounded by a dense population; and these cemeteries from their position are very injurious to the health of the community. But besides these burial places, wherein Christians are alone interred, graves are at present allowed to be dug on the beach for certain of the pagan population, and slaves are buried without restriction to position along the pathways of the suburbs of the town. I recommended that these Christian burial-grounds should be closed up, and that cemeteries should be opened to the leeward of the town, where there is abundance of land lying waste suitable for the purpose, where a piece of ground might also be set apart wherein to bury the dead of the pagan and slave population. The mass of the inhabitants bury their dead in the basement floor of their houses,—a practice *not* confined to the pagan part of the population, but also practised by many respectable and wealthy families. This hurtful custom cannot be too soon discontinued. It is not done by the natives of the interior, but by all accounts it has been an ancient custom in the coast towns. When the deceased is wealthy, valuable articles, as gold ornaments, gold-dust, aggerly-beads, etc., are placed in the coffin, and the body is sprinkled with gold-dust. These tombs in this way become family-banks, and in the time of trouble the gold so deposited is applied to meet pressing claims, or other family purposes. The practice of depositing articles of value with the dead is of very ancient origin, for King David had large treasure placed in his tomb by his son Solomon. I may here mention, that several persons have been buried in the floor of the medical store of the Colonial Hospital, in the surgery, and in the kitchen used by the female prisoners. Suitable epitaphs are engraved on marble slabs which mark the spot where two of the dead rest.

The natives are generally tall and well formed, thick lips and flat noses being little seen among them. On the contrary, many of their noses are fairly prominent, and several are hooked. Many of the men allow the beard to grow, and moustaches and whiskers are very generally worn by them. The young women are remarkably pretty and modest in their demeanour. Their feet and legs are generally finely

formed; but several of the women walk badly, or are pigeon-toed, as it is termed. The people are as a body courteous, kind, and hospitable, easily excited to anger, but it is soon appeased. Perhaps they may be more suspicious than the natives of cold climates; but they are nevertheless a sociable and joyous people. Their worst fault is a propensity to lie; and this vice is exhibited to a lamentable extent when giving evidence in our courts of justice. Servants also consider it no crime to rob the white man; and, so long as they are undetected, they do not lose cast among their equals, although the latter may be aware of their thefts. In a general point of view, they may fairly be considered as a well-meaning people, allowance being made for their present state of civilization. They possess no small share of benevolence, honesty, and sincerity; but I am bound to state, that these good qualities prevail to a much greater extent among the people of the rural districts, than is generally the case among the inhabitants of the waterside. On the coast the people too often imitate the bad qualities of some Europeans; and but few of them acquire, or seek to acquire, the energy, firmness of character, and good conduct of the majority of the white races who dwell among them; steady, industrious habits being certainly more encouraged inland, where vice and profligacy are more checked than on the sea-board towns. The main cause of a vast deal of this immorality is clearly traceable to the universal prevalence of domestic slavery. The whole of the social fabric, "woof and warp," as was justly stated by Sir B. Pine, is slavery. With respect to domestic slavery, an able writer in the *West African Herald* correctly remarks, that in our courts of justice equitable regard is paid to the local customs of the natives, so far as the same are not repugnant to Christianity or to natural justice. But in a country where slavery pervades society, from the heir to a chieftom to the meanest servant, and where every man has from time immemorial looked upon his children and slaves as the most valuable property he possesses, it is impossible to abstain from questions between master and slave, and disputed rights of slaves; inasmuch, *as claims are frequently set up by individuals to whole families without any foundation, and if these were not examined and determined, the subjects of such claims would inevitably be reduced to slavery whenever a claimant had the power to enforce his claims.* The British magistrate, *while rigidly abstaining from interfering to enforce slavery, always endeavours to mitigate as far as possible the evils inherent in the system,* taking care not to violate the long established laws and usages of the country. Power has been always assumed to emancipate slaves found to

have been treated with cruelty ; and this power seems to be acquiesced in by the natives, although in many cases submitted to by them with great reluctance. It is the principal means we possess of checking and ameliorating the evils of domestic slavery. Upon the Gold Coast the relations of master and slave are much the same as we read of in the Old Testament ; for they are treated as members of the family, especially in the rural districts. Slaves by their industry frequently accumulate considerable property, and become the possessors of land and slaves, over which, although the master claims rights of very indefinite extent, yet of which custom prevents him from wantonly or to an unreasonable extent depriving them ; and by means of which, in the event of disagreement with their master, slaves not unfrequently redeem themselves by purchasing their freedom. Slaves on the coast are, however, beginning to be restive, and frequently manifest their impatience of the galling yoke of bondsmen. A custom formerly prevailed among the chiefs and headmen to devote from early youth certain male or female slaves to be sacrificed at their death, to attend and serve them in another world. These slaves were called "Okroes", a word signifying the soul or spirit. They were always treated with consideration, and were the admitted confidants of all their master's secrets. A necklace to which a gold locket is secured is worn by them ; for although human sacrifices have never been tolerated by the British Government, the custom of having "Okroes" has survived the interdict. The majority of the slaves are brought from the country beyond Ashantee, and are eagerly purchased by the people of the protected territories. The enslaved people are called "donkos" ; and in my opinion their introduction, although in the first instance a very great evil, has yet carried in its train much good. They are a hardy, enduring race, and where their good qualities have room to expand, they are found to be a brave and trustworthy people. Their services during the Crobo revolt in 1858, and trouble in the Abrah district in 1859, showed their value as soldiers ; and their intermarriage with the Fantees, and other indigenous tribes, will improve the latter races.

The dress of the men consists of a piece of cloth loosely wrapped about the body, but they likewise wear besides a cloth round the loins. In saluting their superiors, they remove the cloth from one of the shoulders. The women dress much in the same way as the men, but they wear a zone of beads round their loins. To this girdle a pad, or bustle, called "cankey," is fastened above the buttocks, upon which they place their infants when at work, or when

travelling from home. They are fond of adorning their persons with necklaces, bracelets, and rings. Upon their feet some of them wear brass rings, which are of an oval shape, and made to surround the heel, and reach to the middle of the foot. On the toes many of them wear brass rings, which women of the higher ranks exchange for gold rings on special occasions. In general the women appear in public with the breasts uncovered; their garment is secured to the waist either by a girdle, or by simply wrapping it lightly round their persons. Women of rank and fashion have a number of keys suspended by a ring to the girdle, which, jingling together, serves to announce their approach. Some of the men and women are in the habit of wearing round one of the wrists a few of the front teeth of deceased relatives strung necklace fashion. The hair of the young girls is neatly plaited into corkscrew curls, and women of maturer age wear it brushed from before and behind into a pyramid supported by an internal cushion, and secured by a handsome back comb plaited with gold. They are very fond of perfumes. In the coast towns a proportion of both sexes wear European clothing, and no expense is spared to obtain the best and newest style of dress. Too often, this love of dress becomes quite a passion among the young people, and its inordinate indulgence occasionally leads to pilfering and other dishonest acts. The mass of the people are pagans, but a good many profess Christianity. Considering the long period that has elapsed since the Gold Coast has been under the protection of the British Government, little progress has been made in the knowledge of our language, as comparatively very few of the people can speak English.

The food of the mass of the population chiefly consists of vegetables, with fresh fish, and dried fish in excess, often so highly ammoniacal as to be commonly known under the name of "stink fish," with land snails, and sea and land crabs, and crayfish. But their principal dish is made with fish and fowl singly or together, to which freshly-made palm oil, red peppers, salt, with shallots, or, as a substitute for the latter, the bark of a tree called "edooah ahyew," (which resembles the onion in flavour and taste,) bitter tomatoes, or ocroes, are added. They eat this highly-seasoned stew with unleavened bread, made of Indian corn called "cankey," or with pounded yams, or plantains, which, when cooked, is called "foofoo." The palm oil, when recently expressed (and it is very seldom used except in a fresh state), is delicate and wholesome, and quite different from the rancid palm oil imported to England. They are in the habit of eating once or twice a day, and often

distend the stomach with bulky food to such an extent that its functions, and those of the liver, become disturbed and weakened nature relieving herself by passing the indigested food away in the form of diarrhoea. Hence, it follows that the food of the black and coloured population generally is less nourishing and stimulating than that of the European, and they consequently suffer so little from fever; but, nevertheless, when attacked with disease, the vital vigour of their constitution is so slight that they are less able to bear up against the shock, or to rally when the powers of life have been reduced by physical depression.

The men and women eat separately, three or more placing themselves round the dish of soup or stew, into which they alternately dip the "cankey or foofoo." In general they do not drink with their meals; but after the repast they sometimes drink freely of palm wine or rum.

Tobacco is largely smoked by both sexes. Great part of the food of the people on the coast consists, as I have just stated, of bread made from Indian corn, while the natives inland subsist, chiefly, upon yams, cassada, sweet potatoes, and plantains, and in this respect the former are certainly in advance of the latter, as the use of cereals as food has always been accounted a marked step in national civilization.

With regard to animal food, there is considerable difficulty in procuring regular supplies, as butchers' meat is not sold in the markets; consequently, Europeans must either kill a goat or sheep, which is both expensive and wasteful, or they are obliged to purchase a much larger quantity of the mutton or goat's flesh that is offered for sale than they want, or will keep wholesome until used up. Beef is rarely to be got on the windward coast; but at Accra very good beef can be obtained. Poultry is, however, abundant, reasonable in price, and, although small, is well-flavoured, and turkeys from the Leeward districts may occasionally be obtained at fair prices. The vegetable market of Cape Coast is much better supplied than that of Accra. In the former, yams of the finest quality, cassada, ocroes, sweet potatoes, calavances, pumpkins, with calciloo, an excellent substitute for spinach, may, one or other, be had all the year round, and excellent cabbages are occasionally offered for sale. Bitter tomatoes, peppers, shallots, &c., help to season the food, and render it more piquant. The sameness of the diet may, moreover, be varied by preserved meats and vegetables; but the high prices demanded by the merchants for these articles at present restrict their use, and, in fact, operate as a prohibition to their more general consumption. Cape Coast is pretty well supplied with fish; but the bulk of

the fish taken consists of a description of herring, which are cured in large quantities by roasting them for the home market, or they are sent into the interior, and to the Ashantee country, where they are in great request. At Cape Coast the fishermen do not use deep sea lines, but merely hand seines—a circumstance which prevents their taking the larger and finer kinds of fish, which swim at a depth out of the reach of their nets; but at Winnebah, Accra, and Pram Pram, the fishermen fish with deep sea lines, and, consequently, much larger and finer kinds of fish are taken at these places than is the case at this station. Many of the country-cooked dishes which are brought to table in the native-made pots in which they are cooked, are good and wholesome, and excellent as a change of diet. In cooking, the natives prefer to pound their food. Thus yams, plantains, and cassada, are triturated between stones, and served up under the name of “fofoo,” and are eaten with soup, meat, or fish.

Fruit, contrary to what might be expected, is scarce, and often cannot be procured. Compared either with Sierra Leone or the Gambia, the supply is indifferent, and the variety is at present limited to pines, limes, sour sops, bannanas, and plantains, the water melon, papua, tiger and ground nuts. Good oranges are occasionally to be got from “Shumah,” but they are not sold in the market. Cocoa nuts are abundant, and the milk is a most refreshing and wholesome beverage, which can be freely drank to allay thirst. It ought, however, to be taken from the young nut.

A great deal of sickness and disease is caused by the impurity of the water, which is obtained by the bulk of the people from ponds originally hollowed out in procuring clay for building their houses. The surfaces of these reservoirs are covered with a broad-leaved duckweed and rushes. These plants screen the water from the sun, prevent evaporation, and contribute to its coolness and freshness. But it is too often turbid and unwholesome. I have sometimes met with water taken from a distance in the bush which was drawn from pools collected in natural cisterns in the rocks, which in colour resembled dark sherry, yet its taste and flavour was not unpleasant. The colouring matter had been derived from the leaves of the surrounding trees falling into the water.

In the forts excellent water is supplied to the troops from large tanks. But the supply in Cape Coast is at present very inadequate to meet the wants of the townspeople, and in the dry weather, or in seasons of drought, as was the case in 1858, it must be procured from springs in the bush, or from the

“Sweet,” or “Aquatechie” rivers. A number of wells, dug, I understand, by the Portuguese, are situated near the head of the ravine referred to in my description of the town of Cape Coast; but, as they belong to private families, they are kept carefully locked up, and are only accessible to a privileged number of the community. An unfinished tank, built by subscription, and which, I understand, cost £1,500, was erected near the centre of the town, and if it is ever completed, will prove of the greatest advantage. In 1857, I was called upon, as a member of a commission, to report upon and examine the sanitary condition of Cape Coast Castle. The tanks were, at that time, in a most unsatisfactory condition, being polluted by feculent matter washed into them from the badly arranged privies. Since that report was made the tanks have been cleaned out, and porcelain tubing now conveys the water along the spur and great triangular spaces to them. The appointment of the commission also led to a strong representation to the head of the Commissariat Department for a supply of filters for the use of the officers in garrison, which was at once complied with. This boon they owed to that talented officer, D. A. Commissary-General R. D. Ross, whose friendship I had the happiness of enjoying while resident on the Gold Coast. I may here state that there is good grounds for believing that the surface water which falls upon the castle yards penetrates into the numerous graves below, and from thence finds its way into the adjoining tanks charged with the corruption of decaying humanity. The water which enters the tanks is, I regret to say, still unfiltered, although expensive materials were lately sent out by the Government for that purpose. To render the tanks complete, these filters should be erected as soon as possible, and the tanks should be made perfectly watertight, which they were not when I left the coast in August 1859. Another point would be to obtain an abundant supply of water, and this could readily be effected, at a moderate expense, by boring and constructing wells. It might, indeed, be easily conveyed from the Sweet River into the town, and the only obstacle at present opposed to its execution is want of means to carry out the project.

Polygamy exists on every part of this coast, and a man may have as many wives as he can maintain. The wealthy men have a number of wives, whom they neglect or caress in proportion to their sensual appetite; but the first wife has the sole management of the domestic affairs indoors, while the husband attends to the planting of corn or yams in their

season, etc. The women are not confined, but they are, nevertheless, jealously watched by the first wife; and should she discover any liaison of the other wives or concubines, she is sure to be well rewarded for her diligence. It sometimes, however, happens that the lady herself, if she has not lost her charms, is suspected, when she is tried by the fetish ordeal of drinking an infusion of the melley-tree. The priest having administered the oath of imprecation, the woman swallows a small portion of food, and taking the calabash of red water in her hand, prays that its contents may prove fatal to her if she does not tell the truth. Should the food she has swallowed be ejected from the stomach, her innocence is at once established; but if she dies, her guilt is considered proved. Vomiting, purging, succeeded by collapse, the forerunners of dissolution, are not unfrequently the consequences of the sickening draughts of the red water.

Wives are regularly contracted for, even in childhood; and the mother has the uncontrolled right of disposing of her daughter's hand in marriage. When betrothed, it is the lover's duty liberally to bestow presents upon herself and parents. After a certain amount has been paid by the lover, which sum is regulated by custom and is considered dowry money, the marriage takes place in the presence of assembled relatives and friends. The lady is dressed and decorated, according to her rank, with a garment of rich silk or cloth, gold ornaments, and valuable beads. The bridegroom presents the father with cloth, tobacco, rum, and gunpowder, or gold-dust, when the ceremony is considered complete. The bride is escorted by her husband's female relatives to his home, where she is received with some ceremony by his relatives and friends. The day after the marriage, she is visited by numerous friends anxiously inquiring for her welfare. For a week after the marriage, she must wear her best clothes, and appear in public to show that she has got married. After marriage she becomes the *property* of her husband, and his authority over her is absolute, and cannot be disputed.

When a woman becomes pregnant for the first time, she gives oblations to the fetish, and she likewise walks through the public streets and places attired and adorned, with a few female friends, to intimate her interesting condition. Young girls, in whom the catamenia have never appeared, are considered accursed; and formerly this circumstance served as a pretext for remorselessly selling them into slavery, or offering them up as sacrifices to the fetish, and this was done, although they might be free-born persons. On the first appearance of

the catamenia, girls are exempted for some time from work, and are visited and congratulated by their relatives and friends on having arrived at womanhood. Before, however, these congratulatory visits take place, they are taken by the women to the sea or to a brook, and carefully washed, the nails being closely pared, and the arm-pits and mons veneris depilated. They are then perfumed, and elaborately dressed, the face, arms, and neck being painted in various patterns and with different colours. The devices are generally diced or horizontal lines. Gold coins are frequently neatly tasselled among the hair; and a necklace of gold, agger, or other beads, is generally worn round the neck; the arms, wrists, and toes being adorned with gold or silver armlets, bracelets, anklets, and rings. The whole of the upper part of the body is naked to the waist, the rest of it being gracefully enveloped in a showy piece of silk or other stuff. Thus attired, the girl in the afternoon is paraded through all the streets and public places, accompanied by a troop of young females and elderly women, a parasol being held over her head by one of her friends. The ceremony is performed to let the young men know that she is marriageable. The women suckle their children until they can walk. Both sexes generally go about naked, with the exception of a loin-cloth, until the age of ten or twelve.

The Accras are the only people on the Gold Coast who practise circumcision, and this circumstance is remarkable, considering they, of all the tribes, stand alone in this respect. The rite is performed when the boys are about ten or twelve years of age.

The obsequies of the dead are celebrated for several days by a conjunction of wailing, condoling, and carousing; and if the person is of consequence, this custom is observed very extravagantly. A sheep is sacrificed at the death of a person of moderate circumstances, and several sheep or bullocks upon the death of a chief or wealthy man. The fore-shoulder of the sheep is placed upon the grave. The custom is kept up by volleys of musketry, masquerading, and drinking of rum and palm wine. The noise of the shouting, wailing, singing, and drumming, intermingled with piteous groans and exclamations, at these wakes is astounding. The saturnalia is carried on at intervals until the body is buried. The women throw dust on their heads, and, like the Jews of old, shriek and lament, as if they could recall the soul from the world of spirits. These outward noisy demonstrations of sorrow are acted by persons hired for the occasion. When the funeral is over, and calmness restored, real grief is beheld, and the house

then becomes, in sober earnest, a house of mourning. The head is generally shaved as a sign of mourning; but the women are shaved by their own sex, for the men are so jealous, that if it were done by a male it would, in all probability, be made the ground of a criminal charge against him by the woman or her husband. The celebration of the funeral custom on the Gold Coast is a fruitful source of crime, leading to quarrels and fights, and above all, is a grievous burden to the family, by causing them to incur enormous expense. All the relatives and slaves of the deceased each contribute something in the shape of gold, cloth, spirits, tobacco, or gunpowder, towards the expense; nevertheless, it too often is so ruinous that it can only be met by pawning or selling some member of the family into domestic slavery. This barbarous custom is therefore one of the most active means of perpetuating the pawn system and domestic slavery; for however poor the person may be, every effort is strained to have the funeral obsequies of their relatives well performed. The serious consequences of all this will be better understood when it is known that fifty per cent. is given for the loan of money on the Gold Coast, and that that amount is exacted whether the loan is for a day or for years.

Should a man die insolvent, the body, formerly, was not buried until his debts were discharged. Not long ago, the bodies of persons who had been pawned, or had re-pawned themselves for money due to another, were denied burial rites until their death was verified. The body was placed upon a platform erected in the direction of the creditor's residence, and nearest the part of the country whence the dead pawn had come. It was either tied up in a net, or put in a rough kind of coffin, and left to rot. This was done to enable the creditor to recover his money from the family of the deceased pawn; and to this end it was indispensable that he (the creditor) should be able to prove the fact of the death of the individual, and that he had not sold the pawn into foreign slavery. This fact established, it then became necessary that the family of the dead pawn should either pay the debt or give another pawn or other security before the remains could be interred. Frequently the body remained so long unclaimed that nothing but a skeleton was left to be identified.

When the natives lose in succession one or two children by death, they mark the next born by making one cut on each temple; but should that child also die, they mark their next born by making three vertical and one transverse incision across the temple, these cuts being so made that the marks are

indelible. Should the death of their children occur frequently, they sometimes throw the body of the child which has died last into the bush to be devoured by wild beasts; but they attribute any congenital deformity that may appear in the child that may be born after this barbarous custom to its having been so injured when cast into the jungle, as they firmly believe that the child that has been born defective is the same child whose body they had flung away. This circumstance shows a belief in the doctrine of metempsychosis.

The women of the lower orders wear strings round their legs, and often above their ankles, and these ligatures are generally so tightly drawn that the cord leaves a deep mark upon the skin, showing that the return of the blood in the cutaneous veins had been interrupted. Sometimes these ties are fettered, to cure their pains, when they are knotted, a piece of blue or scarlet cloth being attached to the cords.

Children born with supernumerary fingers or toes are looked upon by the superstitious people of the Gold Coast as witches. In one instance, which came to my knowledge, the infant was on this account, soon after its birth, burnt alive; and in another case, the child was destroyed by twisting its neck, when it was buried in a dungheap. Both these atrocities were committed in the district of Wassaw, several days journey from Cape Coast.

The natives who profess and practise the medical profession are either women or men. The former scarify and cup with much dexterity, letting blood from the veins of the hands and feet to relieve local pains; but venesection from the arm is not practised. Leeches, although abundant, are not used by the natives. In selecting various herbs and plants, they discover no mean power of observation; for there is scarcely a plant without its peculiar healing action being known to them. This knowledge is seldom imparted, but is transmitted from generation to generation, and is generally confined to a female member of the family. The men who practise medicine are ranked with the fetish priests. They do not profess to cure disease in general, but devote their attention to the relief of special ailments. Thus they will, when applied to, say whether they have or have not any skill in the treatment of the particular complaint, or, as they express it, "they have no good medicine for its cure." The consequence is, that there is a vast number of country doctors, each boasting of his skill in the management of his own speciality. Many of them, however, are mere empirics, and deceive their patients by their tricks. Sick persons travel or are carried great distances into the in-

terior to put themselves under a native doctor having a reputation for curing the particular disease they may at the time suffer. The doctor's fee varies according to the rank of the patient ; but it is in general a dollar, 4s. 6d. sterling, a fowl, a goat, or a piece of cotton goods or cutlery, &c.

The chiefs and people entertain a firmly rooted belief in witchcraft ; and also that certain fetish persons and country doctors are skilled in preparing poisons of a nature so subtle, that they may be safely used against their victims without the risk of discovery. These fetish persons are frequently consulted by parties seeking revenge on others. If the person to be fetiched is a man, they sometimes induce a female confederate to lure him to her embraces ; but, before this takes place, her abdomen is punctured, and pounded leaves, or the bark of certain trees, are rubbed into the punctured skin. In the morning she discloses the fact of having fetish medicines about her person, to the great horror and alarm of the dupe, who at once imagines that his virile powers are destroyed. In this lamentable condition, days are spent in trying the effect of a variety of medicines and charms to counteract the fetish ; but at length, driven to despair, he goes to the fetish man who had made the preparation for the woman, when possibly, by the most abject supplication and liberal presents, he induces his persecutor to relieve his infirmity. Thus the imagination is worked upon in removing as well as in implanting the curse, and the man departs with his virility restored. The fear of coming into contact with pernicious substances is displayed in the care manifested by the chiefs and headmen that none shall sit upon their stools or chairs during their absence. For when they assemble in council, or come into our courts, an attendant slave is always in charge of their seats ; and when he rises to speak, or leaves the court, the chair or stool is placed upon its side to prevent fetish medicines being put upon it. Women equally dread the effect of fetish medicines, which they believe can induce sterility, alienate their husbands' affections, or cause some other evil to befall themselves or children.

People put into fetish are, *de facto*, excommunicated ; becoming, for the time, pariahs from society. Shunned even by their friends, they wander about, and either yield to the cruel behests of the fetish priests, or, withdrawing into the recesses of the forest, perish miserably by their own hands. The pernicious influence of this evil was carried to such an extent, that, in March 1857, the local Government issued a proclamation forbidding the practice of putting, or threatening to put, people into fetish, severe punishment being denounced against

persons infringing this decree ; but the Government cannot at present strictly enforce this law, from the great distance of many of the districts from head-quarters, consequently it is often violated with impunity.

Impotence, as may be inferred from the foregoing remarks, is a common complaint on the Gold Coast. They call the disease broke-back ; and frequent applications were made at the dispensary for aphrodisiac remedies to restore their virility, or, as they term it, "strengthen their back."

In taking a retrospective view of the diseases which came under my observation during a service of nearly twenty-three years duration at Sierra Leone and the Gold Coast, my experience is opposed to the theory entertained by many people, that the uncivilised are, to a great extent, exempt from the diseases which afflict their European brethren. I may here remark that in them fevers are generally slight, the acute stage soon terminating in determination to the bowels or skin ; and although its progress is distinctly marked by remissions, it seldom lasts longer than twenty-four hours. They sometimes suffer a good deal from intermittent fever, and continued fever with typhoid symptoms ; but, as a general rule, the foregoing remark will be found correct. I have heard and read of negroes taking yellow fever, but in no case did it happen at Sierra Leone during its prevalence in 1837, 1838, 1839, 1847 ; nor, as far as I understand, in 1859. No example of it occurred to any of my medical brethren in the course of their practice ; and, as far as my observation extends, it rarely attacked persons of mixed blood—a circumstance I had the most ample means of noticing while engaged in mitigating the ravages of the yellow fever in the years just quoted. It is, however, worthy of record, that yellow fever and epidemic small-pox prevailed in 1837 and 1839, the latter preceding, accompanying, and disappearing nearly at the same time as the former. Persons dying of small-pox at Sierra Leone have, by mistake, been put down as cut off by yellow fever. This occurred last year, when the Colonial Secretary, a mulatto gentleman from the West Indies, was reported in the *Times* to have died of yellow fever, whereas he died of epidemic small-pox. X

In the period comprehended in this report, no epidemic prevailed. Rumours were current at different times during the year of the appearance of small-pox at various stations ; but these statements were exaggerated, and in most instances unfounded. At least, I saw no case of small-pox during the year, and I feel satisfied I would have detected such

X In proof of fact yellow fever would altogether disappear from W. Africa if the population consisted of Negroes alone. R. C.

cases, notwithstanding that the natives do everything in their power to conceal its presence by the immediate removal of the afflicted persons into the bush, I may here mention the remarkable fact, that few persons among the population, whom I have had ample opportunities of observing in different parts of the protected territory, are marked with small-pox. With regard to vaccination, I regret to state that it failed in every instance in which it was repeatedly tried both by myself and several of the military medical officers. This circumstance in no way weakens my firm belief that vaccination will succeed on the Gold Coast; for there is unquestionable living evidence of its having formerly succeeded well. At Sierra Leone I have known it fail in hundreds of instances, but ultimately succeed well, and be kept up for many months at a time; and assuredly a similar result will happen in these settlements if the medical officers, instead of being disheartened by repeated failures, are incited to renewed efforts to introduce this inestimable blessing among the natives of the Gold Coast. That nothing might be wanting to secure this object, I suggested that no pains should be spared in charging to the utmost the bone-points with lymph which are sent out to this part of the coast, as I feel convinced attention to this apparently trivial circumstance will largely contribute to the success of vaccination there.

The natives sometimes inoculate for the small-pox, which they do by inserting the variolous matter into a puncture upon one of the wrists. In confluent small-pox they open the pustules, lubricate the body with palm or nut oils, and cause the patients to take warm drinks, and keep them nestled close to the fire. I saw a good many persons who had lost the sight of one or both eyes from small-pox; and this is not surprising considering the close and foul air which the patients breathe during their treatment by the native doctors. On the Gold Coast, no custom is made for persons who die of small-pox.

A few persons labouring under measles were brought to me during the year; but the disease, I am glad to state, did not become epidemic, as in 1857. At Accra, I several times saw children, when covered with the eruption of measles, rubbed over by their mothers with dust picked up from the street.

Several of those treated at the hospital during the year, had, in the first instance, been applicants at the dispensary. A large proportion of those who attended were affected

x Since the above was written many persons have been successfully vaccinated by R. C. on the Gold Coast.

with old-standing scrofulous ulcerations of the skin, and these persons had their sores daily dressed, while, in several cases, their ulcers were caused by caries, or necrosed bones, and, consequently, the reparative process required weeks, sometimes months, for its completion, and not unfrequently they no sooner healed up than they broke out afresh. A very large number of those prescribed for suffered from the most inveterate skin disease. Scabies, called kra-kra on this coast, is a common disease, and is very infectious. It is frequent among children, and the slave population are seldom without it, the disease being induced by the poverty of their diet, bad ventilation, and dirty habits; but, nevertheless, they do not appear to be much inconvenienced by it. The poorer class of people and slaves also suffer much from yaws. Persons affected with psoriasis palmaris came occasionally under treatment; and a great many afflicted with herpetic eruptions, situated on various parts of the body, were constant applicants for relief. Cases of noli me tangere, affecting the nose, lips, and other parts of the face, sometimes presented themselves. From having met with persons in the inland parts of the country affected with it, I am of opinion it is a rather prevalent disorder among the people. In the worst and most intractable forms of skin diseases which I was called upon to treat among the natives, I found the solution of the arsenite of potass by far the most useful medicine.

Cancrum oris is occasionally met with in children, several infants being brought to me where the cheek was penetrated before my advice was sought by their parents. The disease appeared in some of them during teething.

Glandular swellings in the neck, or axilla, were frequent subjects of treatment; and occasional cases of goitre presented themselves for relief. Persons labouring under cataract, iritis, and amaurosis were frequent applicants at the dispensary. The number of persons blind from cataract and amaurosis is very considerable; but the number of deaf and dumb people is much less. Many were afflicted with acute or purulent ophthalmia, which, from having been neglected, had destroyed vision. Ophthalmia tarsi is of frequent occurrence; and I was frequently consulted in cases of functional deafness, tinnitus aurium, and for chronic inflammation and thickening of the membranes of the nose and mouth. A relaxed state of the uvula and ulceration of the tonsils are complaints to which they are very liable. Cases of nasal polypus sometimes applied for relief. When suffering from cold or stuffing in the

nose, their applications for sternutatories were urgent, as they have great faith in the virtues of pungent-smelling articles to remove such affections.

Several cases of severe and dangerous wounds were treated in hospital. A boy, about ten years of age, sustained a punctured wound of the belly, with protrusion of the omentum, by falling upon a stake, and a man was admitted with an extensive laceration of the scrotum, the left testis having been torn from its envelopes by the teeth of his infuriated wife.

Among the minor operations I may mention that a tumour, which had originally been a cicatrix raised on the skin by way of ornament, was removed from between the breasts of a young woman. Several young females also applied to have steatomatous growths of one or both lobules of the ear removed; and in all these cases I took away both lobule and tumour. These tumours had been caused by the chronic irritation set up in the lobules by piercing them for the introduction of ear-rings. Many persons suffering from dry gangrene of the little toe came to the hospital to be operated upon.

× Dry gangrene, especially of the little toe, I have observed is a disease of rather common occurrence among the natives of the Gold Coast; and from inquiries I have made on the subject, I find that it is frequently a sequence of suppressed yaws.

With respect to more important operations, I removed the left leg of a man sent to the hospital from Ammalive, suffering from a compound fracture of the tibia and fibula about the middle third. This was the fourth person who had their limbs successfully removed since my arrival on the Gold Coast; and I take this opportunity of recording my conviction that the natives do not display more repugnance to submit to operations than people do elsewhere.

The natives are very liable to constipation, consequently there were numerous and constant applications for purgative medicines to remove this unpleasant condition. Crowds of persons, of both sexes, may be seen upon the beach at early morn, with various medicated decoctions, which they blow into the bowels from a bottle-shaped gourd in order to obtain relief. This constipated state of the bowels, in my opinion, chiefly arises from the unstimulating nature of their diet. This practice has the bad tendency of relaxing the lower bowel, and I have no doubt that its constant repetition weakens the muscles brought into action in the process of defecation, so that it induces and confirms the complaint it is daily used to obviate.

× and at Sierra Leone and the Gambia. H.C.

They consider it most indecent to eructate; and a woman guilty of this breach of manners would be viewed with abhorrence.

A good many persons afflicted with lepra applied for escharotics, but in them the disease had taken far too firm a hold of the system, and had reached its advanced stages, for any class of remedies to cure the malady, the joints of the fingers and toes having dropped off, the soles of the feet being perforated by leprous ulcerations, and the features generally disfigured by lobulated tumours. It appeared to me most prevalent among the slave population, many of whom had no owners, and who were obliged to pick up a miserable and uncertain subsistence, without clothing, unless the dirty and scanty rag which hid their nakedness could be so described, and who were housed in dens reeking with filth, and redolent of squalor and misery.

The leper is frequently paralytic in one or both feet; the controlling power is lost, and the foot flops down suddenly, as if hinged upon the leg.

Elephantiasis and lepra in all its hideous forms prevail, and sarcomatous enlargements of the scrotum frequently attain such dimensions as to reach to the knees, and even below them. The disease is said to prevail more on the windward than on the leeward part of the coast. The natives suppose it may be induced by drinking excessively of palm wine which has been mixed with the juice of the bamboo; but it may, with much greater reason, be accounted for by an excess of fish diet. No pain is felt in the tumour, unless it is left unsupported, its weight apparently causing it by the dragging of the cords.

With regard to lepra, young persons of both sexes, and even infants in arms, were brought to me, in whom it appeared in copper-coloured patches, on the breast, between the shoulders, face, or upper extremities; in many cases it being clearly traceable to hereditary taint. The fingers and toes swell greatly before ulceration, after which they drop off, or are "cut," as the natives term it, much pain having been felt in them, generally at night. The feet and ankles become enormously enlarged and deformed. Foul defecations appear chiefly upon the neck, arms, and legs, the skin of the other parts of the body, although changed in colour, retaining its smoothness. The contrast occasionally seen in this disease from black to a light-brown copper colour is very striking; sometimes little or none of the original colour of the skin remains, a few spots alone indicating its original hue. The

ulcers are at first often superficial, appearing as slight abrasions of the cuticle; but a closer inspection will detect a thin foul crust situated upon its edge. The voice, in some, becomes hoarse, and the throat is tinged with an erysipelatous blush. Should the skin recover its natural colour, the natives consider the disease as cured. It is not considered contagious by them, and they do not hesitate to eat from the same dish, and will even sleep on the same mat with persons afflicted with lepra or elephantiasis. They likewise assert that it cannot be communicated by coition, but they believe it to be hereditary. The wretched sufferers themselves invariably ascribe it to poison having been thrown upon, or secretly given them, by some witch whose displeasure they had incurred. The distemper, with all its loathsome evils, does not appear to shorten life, for they live a long time, and even attain old age. Lepers intermarry.

The natives are very subject to aphthous ulcerations of the mouth, and a spongy bleeding state of the gums, with looseness of the teeth. This appeared to me to depend upon the wide diffusion of land scurvy, aggravated by uniformity of diet, and the depressing influences of the unwholesome condition of their houses aiding the operation of a local miasma. Cases are not rare where there is much bodily wasting, with frequent bloody oozings from the gums, and gangrenous ulcers of the mouth and fauces, with petechial spots on the legs. The habit of taking snuff by the mouth, which is largely practised by both sexes, not only on the Gold Coast, but likewise at the Gambia and Sierra Leone, contributes to erode the gums, besides communicating an offensive odour to the breath. The snuff is placed between the gum and the lower lip, or cheeks, the ugly black ridge disfiguring the pretty faces of many of the black and coloured girls. From all these circumstances, it may be readily supposed that they suffer quite as much from toothache as Europeans.

The blacks are very subject to ulcerations of the feet, and few of them are free from the marks of former deep-seated ulcerations, either on the feet or legs. They manage their sores very badly, washing them far too much, thereby softening the granulations, and otherwise greatly retarding the healing process by their injudicious methods of sprinkling various powders over the face of the ulcer. They inject into sinuses astringent vegetable infusions.

The natives suffer severely from rheumatism, rheumatic swellings of the large joints, and anomalous fugitive pains, often brought on by careless exposure to chills, and their

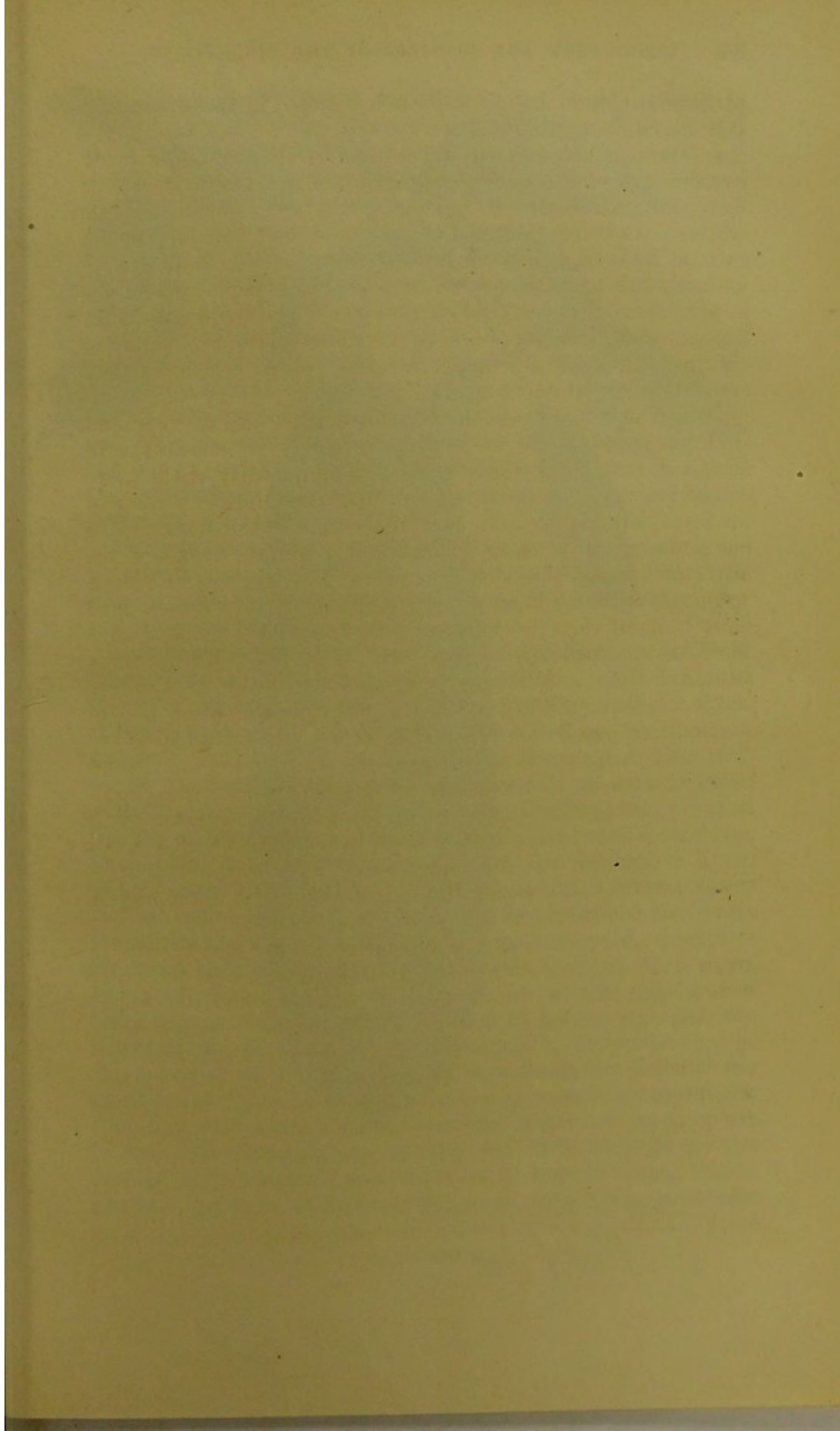
habit of sleeping on the damp earth, exposed in an unprotected state to the heavy night dews.

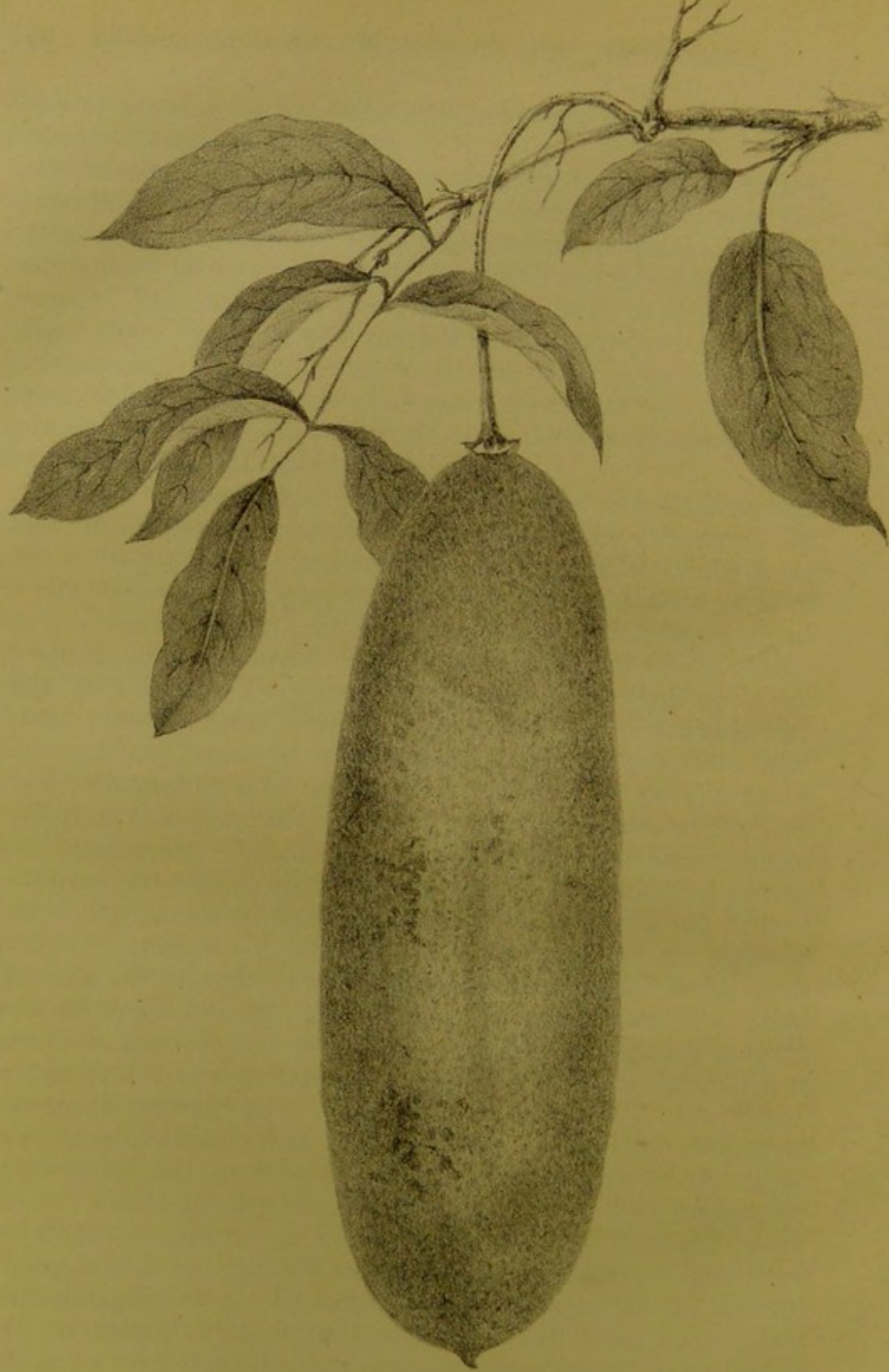
In treating intermittent fever they excite profuse sweating by placing the patient over a pot containing an infusion of the leaves of the castor oil, lime tree, and other plants, a large cotton cloth being thrown over the head, and reaching to the ground. The skin, after being carefully dried, is daubed over with a paste made of the sasmah or black pepper to induce perspiration. They likewise wash the body frequently with warm water. They now, however, appreciate the value of quinine, and invariably apply for and take it whenever they are within reach of procuring it.

Headaches often cause them inconvenience and distress, and their applications for ammonia to smell were constant. To cure it they put into the nostrils a small quantity of the paste of the "sasmah" pepper, and rub over the forehead a paste of the malagetta pepper. In fact, they suppose the fragrancy or pungency of all aromatic plants and perfumes are good for head affections. The dried leaves and powder of an odoriferous plant is much used as a perfume by the women, who wear it about their persons in small bags. It exhales a faint smell resembling new mown hay. The juice of the outer cuticle of the plantain tree is also used in headache, the face and head being bathed with it. Shaving the head is also practised to relieve obstinate headaches, and pounded leaves or red clay are then plastered over it. Cupping is much used in this complaint. A number of small incisions are made in the skin with a sharp knife, upon the temples, forehead, or as near as possible to the seat of pain, when the half of a small gourd is applied, the air being rarefied by burning a little cotton in it. Compressing the head tightly with a kerchief is also much resorted to.

I have observed that the mortality among the natives is greatest at the commencement and termination of the rainy season, and that hepatitis, icterus, diarrhoea, and dysentery, are then most prevalent, being then frequently brought on by eating new corn, ground nuts, cassada, and yams, before they are sufficiently dry. In some parts of the country the natives are interdicted by their rulers from eating yams before they are quite ripe, because they are unwholesome and dangerous articles of food until they arrive at maturity.

Both natives and Europeans suffer much from hepatic affections, and a great many of the former class were treated at the dispensary while suffering from jaundice, either inci-





THE FRUIT OF THE "ETUA" TREE,
OR
KIGLIA AFRICANA.

ipient or complete. Acute hepatitis is apt in this climate to run into abscess. To illustrate the rapidity with which this organ may be completely destroyed, I may mention that I was consulted during the year in the case of two European officers; the first, about twenty-seven years of age, was seized with rigor fever, and pain over the liver, with persistent constipation, and, in spite of the utmost attention, he died in nine days from the commencement of the attack. On examination, the liver was found broken down, and softened into a substance of the consistency of thick jam. In the second case, the officer might be about thirty-six years of age. He was first attacked with hæmorrhoids, to which he was occasionally subject, followed by diarrhœa, prostration of strength, and delirium, and sank soon after the first severe symptoms had set in. Examination after death showed that the liver was extensively burrowed by abscesses, and its substance infiltrated with pus.

Many of those who applied to me for assistance complained of griping pains in the bowels and stomach. To cure the griping pains they drink warm infusions of pepper and ginger, and compress the belly with a bandage.

Dysentery being by far the most fatal disease on the Gold Coast, both to the European and native, I shall take the liberty of saying a few words respecting its treatment. Some of the natives use an enema of a plant called by them "Tanta Annana," and restrict the diet to the flour of Indian corn which has been highly parched or roasted. A soup is eaten with it, made by boiling an infusion of the tanta leaf, scraped roasted plantains, and small pieces of dry fish, until it thickens. Should this mode of treatment fail, they use the bark of a tree called "Etua."* (See Plate.) The bark is boiled for two hours in fresh palm wine, and when cool is drunk three times daily. Boiled rice as a dry diet is also strongly recommended. To relieve tenesmus they introduce into the bowels a suppository, made either of ground grains of paradise, or of the grains of a black pepper called "sûsmah," which is beaten up with the leaves of the plant called "Empoompoo." They also use for this purpose an enema made by expressing the juice of the plant called "yanchie" (a plant of the phormum genus), which they mix with a small quantity of the acetate of copper; but in the first instance, and during the cure, they purge the bowels with drastic medicines, and depend much upon enemata, given in small quantity, so as to be retained in the

* *Kiglia Africana.*

bowels, and upon great attention to diet. They are directed to keep themselves warm, and to rub the loins and belly over with a composition of grains of paradise and other peppers. The patients are allowed by some of the country doctors to wash their bodies with warm water, but, in general, pure water is forbidden, the skin being instead assiduously laved with a cold unstrained infusion made by macerating for one or more days the decayed roots of the plantain tree, with the leaves of the lime tree, cassada plant, and roots of the water lily, but in each case the skin is subsequently anointed with shea butter. After this some light food, generally a gruel called "pampa," made of Indian corn, is taken. In treating dysentery, they strongly recommend their patients to take cold air baths. They are directed to rise at daybreak, and sit naked in the open air, exposed to the cool and pleasant morning breeze, until six o'clock a.m. They are then washed in the infusion before described, have the skin well greased with the shea unguent, and partake of some "pampa" gruel, when they retire to rest, and frequently fall into a sound and refreshing sleep, often lasting many hours. This simple method of obtaining an air bath is likewise much practised to restore the health of invalids convalescing from other lingering illnesses besides dysentery. Persons while suffering from dysentery are not restricted from the use of meat, but the mass of the people being without the means of procuring it, they use dried fish as a substitute, which seems to answer equally well in persons not accustomed to animal food. Crab and crayfish are eaten roasted, but prohibited when boiled; beef is not objected to, provided it has been cooked the previous day; and the same rule applies to venison, and the flesh of the porcupine, elephant, and buffalo; indeed, many of the natives consider buffalo meat, not only as a safe article of diet, but even view it as a valuable curative agent. Mutton and pork, in any shape or form, are prohibited, as well as the flesh of the wild and domestic fowl. A cold infusion of the bark of a tree possessing the medical virtues of Winters bark, with the root, bark, and leaves of the Boabob tree, is drunk three or four times daily. The bark resembling Winters is procured from a tree growing in the inland districts of the settlements. It is rough, and of a brown colour. Sometimes the powder of these plants is given in cold water frequently during the day, and this powder is also mixed up with a small quantity of warm water, and administered as an enema at irregular intervals. Several of their medicines are given in palm oil, on the supposition that when mixed with water they become

inert. A great many other remedies are used in this disease, and I have merely given a meagre outline of the general principles applied by them to cure it. They consider dysentery highly contagious, and take care not to use the same convenience as the patient.

With regard to our medicines, they highly esteem castor oil in dysentery, diarrhœa, and other abdominal disorders, and prefer it and jalap as purgatives to any other in use in Europe.

It will be observed that the method of treatment adopted by the natives to cure dysentery differs widely from the European plan of treatment in one most important point, that of diet; for the natives direct that the patient's food shall be dry and nutritive, whereas the general rule of diet adopted by European medical officers is to confine the sufferer to soups and farinaceous substances, with an entire abstinence from solid animal food. This, in my opinion, is the secret of the great success attained by the natives in the cure of dysentery. With regard to animal food, I am quite satisfied that it is unwisely interdicted in the treatment of dysentery, more especially when it becomes chronic. It is difficult to draw the line of demarcation between diarrhœa and dysentery, where the one terminates and the other begins; but diarrhœa will sometimes last for months at a time without dysentery, and with no organic disease of the liver, proving fatal by its persistence and the debility and emaciation it induces. In dysentery no one remedy has been found, in European practice, on the Gold Coast much superior to another; but great benefit has been frequently derived by giving the acetate of lead and opium in chronic cases. When the stools are frothy and feculent, sulphate of copper has been found of the most advantage.

Having myself suffered severely from dysenteric diarrhœa, I may briefly state that I obtained the greatest relief from the painful and distressing tormin^{is} ^{and tenesmus} always more or less present from enemata composed of half a wineglassful of thin arrow-root, mixed up with a teaspoonful of tincture of opium, the bowels having been previously cleared out with castor-oil. This, combined with strict attention to a diet consisting of arrow-root and chicken-tea, was the chief treatment pursued, the strength being kept up with moderate quantities of port-wine. I need hardly observe that there must be an entire abstinence from food dressed with peppers, and from the varied sauces of the table, many persons having died of the consequences of indulging their appetites while convalescing from an attack of dysentery.

Dysentery is, then, the most fatal disease on the Gold Coast; but with ordinary care and attention, no apprehension need be entertained on the subject, provided medical aid is soon procured. Should the disease, however, persist, a removal to Europe is indispensably necessary to save life. An order from the military medical department was issued in 1856, directing the medical officers serving on the Gold Coast to send home, without loss of time, any officer who might be attacked with dysentery. With colonial European officers it is very different; and too often they delay leaving the coast until it is too late to do so, and death puts an end to their sufferings. The medical attendant may have urged his patient to leave when he saw his danger; but he can do no more than advise.

Syphilis, and all its sequelæ, are very prevalent among both sexes, and few of the males have the genital organs intact. In many, one or both testes will be found enlarged, or much diminished in volume, whilst others have the cords thickened and varicose; many have the inguinal glands permanently enlarged, and cicatrices from ulcerated bubo are frequent. The penis also often bears the marks of chancre; and its partial removal, or complete destruction, is no uncommon consequence of neglect and improper treatment. They are subject to œdematous swellings of the penis and scrotum, and to hæmorrhage from the penis and urethra requiring vigorous measures to repress it.

Gonorrhœa and gleet discharges are very common; and strictures and fistulæ of long standing are very common, and are constantly brought to the surgeon's notice. Cases of orchitis often occur, and hydrocele occasionally. They endeavour to cure hydrocele by vapour baths and topical applications of lime leaves.

Retention and incontinence of urine (especially the former) are common; but calculous disorders are almost unknown among the natives. In a case of incontinence of urine, in the person of a slave man, about thirty-six years of age, which had existed four years, I obtained a perfect cure by giving him a combination of alum and tincture of cantharides, in the proportion of forty grains of the former to two fluid drachms of the latter in twenty fluid ounces of water, of which I caused him to take half a wine glassful three times daily. I have deemed it right to mention the medicine so successfully prescribed in this instance, because I trust it may induce others to give it a fair trial in similar cases.

I have seldom noticed disease of the arterial tunics; but I

was frequently consulted for palpitation of the heart, and neuralgic pains of that organ.

Very severe injuries, as burns and gunshot wounds, were occasionally subjects of treatment. Persons, for example, when out shooting in the bush, sometimes fire at and wound or kill people by mistake; for, seeing and hearing the leaves of the copse rustling and moving, but unable to distinguish the object at which they have fired, they suppose these movements are caused by the game they are at the time pursuing. The natives of the Gold Coast, when in much trouble, often terminate their lives and miseries by blowing themselves up with gunpowder. A case of this kind occurred in 1857, where the father of a family fired a train of gunpowder, from the effects of which he perished, with his wife, two children, and sister-in-law.

Fractures and dislocations, the result of accident or violence, were just as numerous in proportion to the population as in any other colony. Dislocation of the lower jaw, I especially noticed, was of frequent occurrence both on the Gold Coast and at Sierra Leone.

A few persons who have suffered in early life from rachitis may be observed going about upon their hands, which are protected by wooden instruments; and the proportion of persons with distorted spine, which gives rise to the hunch-back, and also with talipes or club feet, are quite as often met with as in Europe. The native chiefs and kings are fond of having hunch-backed people about them as court-criers, to carry messages to short distances, and to amuse them with their buffoonery, grotesque appearance, and generally quick and witty remarks. On the death of a person whose spine is much hunched up, the natives cut away the hunch before they bury the body, because they believe, that if this were not done, other members of the deceased's family would become similarly deformed. In some parts of the country, the natives, on the death of a leper, burn the body, and also the clothes and mats he had used; but in other parts, lepers are interred in the nests raised by the white ant, and they do not make "custom" for them.

The number of children with large and protuberant bellies is remarkable; but it does not seem to arise from disease, but from being allowed to cram with food of difficult digestion, as, when they grow up, the enlargement disappears.

Exomphalos is very common, and arises either from cutting the chord too short, or from neglecting to bandage the umbilicus after birth. On certain days of the week, the natives rigidly abstain from labour. The fishermen, for instance, do not cast

their nets on Tuesdays, and Friday is sacredly held by some, while men in easy circumstances keep their birth-day as a holiday.

Stammering is a defect very common among the people; but it is affected by many among them, as it is considered *fashionable* to stammer. Persons with harelip, and tonguetied infants, are quite as numerous as in Europe.

Malignant tumours are rare; but fibrous growths, and those of a steatomatous and ganglionic character come frequently under surgical treatment.

I was consulted by two persons who had been attacked with aphonia; they were both young people; one of them was a girl of eighteen years, who had been attacked five days before I saw her, but she made a good recovery.

I was frequently called upon to prescribe for young children suffering from swellings of the feet and legs, resembling anasarca, and proving fatal unless properly treated. The natives, to cure this complaint, wash the children with a variety of cold vegetable astringent infusions, and they likewise do the same to a child which is cachectic or emaciating. Very many of these children were slaves, who had been purchased from the Ashantees or Wassaws, and most of them were about three years of age. Judging from what has fallen under my observation at Cape Coast, I am of opinion that three hundred slaves are brought to that station every quarter from Coomasie and Wassaw.

The natives suffer occasionally from œdema of the face, and they view its appearance with great alarm, as it is a sure index of constitutional decay and disease of the liver. Persons affected in this way have a bloated, sickly aspect, with mental dejection and indifference to life. In this very fatal disease, the colour of the skin gradually alters from a black to a dirty whitish-brown or clay colour. The inside of the lips and tongue looks as it were blanched, and the gums become soft and pallid; the pulse becomes quick and small, accompanied with palpitations of the heart, and throbbing of the great vessels of the neck; respiration is easily hurried, and is often oppressed; the abdomen swells, the mesenteric glands are enlarged and hardened, and the extremities become anasarcaous.

The negroes are subject to apoplectic attacks, sometimes brought on from excessive drinking; and epilepsy and chorea came occasionally under my notice.

Trismus infantium, or "the nine days' sick," as they call it, is common. If the child escape its influence until after the ninth day, they consider it safe.

Tetanus, either in its idiopathic or traumatic form, is by no means uncommon among the natives. Several persons applied for relief while suffering from an inability to separate one or both angles of the lower from the upper jaw. It is perfectly distinct from tetanus, as is readily shown by the expression of the countenance. It arises apparently from malarious influence. At all events, the muscles of the lower jaw are stiff, and cannot be moved by the patient's will.

Delirium tremens is, I regret to say, by no means rare among the natives; and I here record the great advantage which attended the use of chloroform in one of the worst cases of the disease which I ever witnessed. A European, about thirty years of age, had, before I saw him, passed several nights and days in the most distressing condition, haunted with the idea that he had been guilty of a fearful crime. In this lamentable plight, the powers of life being greatly exhausted, I suggested that chloroform should be tried. It was accordingly administered, but it failed in the first instance to induce sleep; nevertheless it soothed and calmed down the frightful mental alarm and apprehension, and a further and longer trial of it induced a most refreshing sleep, from which he awoke free from delirium. Everything went on well after this, and he made a rapid recovery.

A superficial observer might suppose, from the very few deranged or imbecile persons going about at large in the coast towns, that the inhabitants were seldom attacked by maniacal disease; but, from inquiries I have made on this subject, I am satisfied such is not the fact. Lunatics, it is true, are seldom seen in the coast towns, because their friends remove them into the bush as soon as possible after the maniacal paroxysm has been manifested; for the Fantees, Accras, and all the other races on the Gold Coast view madness with horror, and as bringing disgrace upon the afflicted party, his family, and friends. Suitable houses are therefore generally provided in the bush for the reception and medical treatment of the insane. In the neighbourhood of Accra, persons suffering from mania are sent to the town of Teshia, a few miles distant from Accra. With respect to the mode of treatment adopted by their doctors in these native asylums, the primary objects aimed at appear to be the security of the patients and the prevention of harm being done by them, either to themselves or others, during the maniacal paroxysms. With these objects in view, the patients are carefully secured by fastening the wrist to a log of wood by a staple, sufficient space being left between the log and staple to serve the purpose of a rude handcuff. If the

lunatic is very violent, the ankles are similarly fastened. In this condition they lie or sit on the ground, where they are often much neglected, being allowed to become dirty and extremely loathsome. On the first appearance of the disease, the head is shaved, when pounded leaves and other cooling applications are kept on it to reduce its temperature, and to calm down mental irritation.

The people of the coast are liable to a lethargy known among them as "the sleepy sickness." The drowsiness is so overpowering that the patient falls asleep even while eating. Young girls, in whom the catamenia has never appeared, or is suppressed, are frequently attacked with the disease. At Sierra Leone, I have known several instances of its being induced in youths of both sexes from smoking "Dianba," or Indian hemp.*

Attacks of coup de soleil are of rare occurrence. Indeed, it is a very common thing to see children secured to their mother's backs with the head exposed to the fierce glare and heat of noonday without suffering in the slightest. This immunity is owing, in a great measure, to the nature of their hair, and also to the relaxation of the system by which profuse perspiration follows the least exertion, thereby equalising the circulation, and preventing local congestions. Even Europeans are not subject to sun-stroke.

The powder of the Malagetta pepper is extensively used, and is applied externally in fever, rheumatic and fugitive pains. One way of applying it is by spitting the pepper from the mouth over the affected parts in a thin steamy shower. The pepper is also mixed into a paste, with water, and painted over the skin in longitudinal lines; but in Wassaw and elsewhere they daub it over the skin without taking that trouble. All the great joints are at the same time marked with a single spot of white chalk; and this observance is a custom which is practised only on the living; for the dead, although perfumed with Malagetta pepper and sweet-scented plants, are never chalked.

The native doctors entertain a firm belief that it is unsafe to give medicines after sunset, and abstain from doing so except on urgent occasions. They suppose that the body is then too weak to undergo their action, on the broad grounds that the sinking of the sun in the horizon is the universal signal

* See contributions by R. Clarke, Esq. on the "Treatment of *Lethargus*", in the *London Medical Gazette* for September 1840, and *London and Edinburgh Monthly Journal of Medical Science* for April 1842.

for man to seek to recruit his health by repose, and that remedies then taken act injuriously instead of beneficially.

The natives of both sexes pay great attention to keep the skin clean, and generally wash their bodies twice daily, and when bathing, dry-scrub it with sand to remove impurities. I have frequently seen them lie down on the beach, and scrub themselves by rubbing the back against the sand; but they often assist one another to perform this salutary process.

They also scrub the soles of the feet clean by dancing backwards and forwards upon the sand; but all this care to preserve the skin clean does not extend to their clothing, which is only washed at uncertain intervals, and is frequently extremely dirty.

Accidents from the bites of snakes occasionally happen; and two instances have fallen under my notice. A slave, a young man about seventeen years of age, was bitten while working in the bush on the outer and middle third of the right leg. I saw him about an hour after the receipt of the injury, and found his friends had placed cords both above and below the wound, so as effectually to intercept the circulation. The pulse was very feeble, the skin cold and clammy, and, in a word, he was in a state of collapse. In these circumstances, I gave him a draught of aromatic spirits of ammonia and opium, and caused the wound to be diligently sucked, when I freely applied the nitrate of silver over its surface. His friends, having removed him, gave him an emetic, which caused him to vomit. He recovered in three weeks from the effect of the bite. In the other instance, a young Ashantee slave was bitten by a snake in the forearm, in the act of moving a heavy package, and some of his countrymen who were beside him at the time applied ligatures both above and below the wound, and at the same time freely scarified it with a razor, and then rubbed a lime, and applied powdered leaves over it, while others of them promptly killed the snake, and having extracted both the poison sacs, they mixed the venom with trade rum, and lime juice, and caused him to drink the mixture. Soon after he had taken the draught he vomited plentifully. There was very little swelling, and in a few days he was able to return to his usual avocations. In an infant bitten at Sierra Leone, in the right wrist, by a snake (the "cerastes"), and who died fifteen minutes after its infliction, I observed that the injured arm was greatly swollen, while the muscles were like freshly-killed beef. This was in remarkable contrast to the left arm, the muscles of which were pale and flaccid.

The treatment adopted by the Ashantees, in the case just referred to, resembles the homœopathic doctrine, as expressed in the axiom, *Similia similibus curantur*. The powdered bark and leaves of the cola tree, or its infusion, are considered by the natives of the Gold Coast an antidote for snake bites, provided one or other be promptly given to the sufferer.

Regarding guinea worm, I am satisfied that it is not caused by drinking impure water. The natives entertain an idea that the guinea worm prefers taking up its abode in the skin of those persons who have, as they express it, "sweet flesh," and that it avoids the skin of those in whom the perspiratory fluid is acid, the prevailing opinion among them being that the germ of the worm gets in some way into the skin; in what way they do not know. All the natives of the Gold Coast believe that there is a male and female guinea worm. The male worm is about the thickness of a crow's quill, the female being about the thickness of stout linen thread. There is no other perceptible difference, and they attain an equal length. Some of the people think it of more frequent occurrence during the rains, while others consider it quite as much so in the dry season. From a peculiar idiosyncrasy, some persons are attacked by the worm every year, occasionally having several worms in various parts of the body at one and the same time. An individual may have at one and the same time a male and female guinea worm in the body, when two or three worms are present in it. The length of time that may elapse before the worm is extracted varies. Sometimes it will take six months, and if cut or broken two or three years; but should an abscess form, and ripen quickly, its expulsion is soon effected; but the average time may be reckoned at three months before it can be got rid of. They consider that the female worm is the most difficult to get rid of, and if either the male or female worm is broken, they believe that worms are produced from the fluid exuded from the divided parts. Children seven months old have frequently guinea worms, generally in their feet, legs, or arms. Many of the natives suppose the worms existed in their bodies before they were born; but it is well known that children, while their parents are suffering from the disease, come into the world without a trace of the worm, and grow up without getting it. Some persons continue subject to this cruel infliction during their lives, and aged persons are frequently afflicted with worms of each sex. I observed that when the troops and constables went into the rural districts, or along the seaboard, and had to remain there on duty for a week, or a longer time, that they generally returned with

guinea worm in their legs or feet, and this appeared to me to occur more frequently during the wet season of the year. To cure it, a cold poultice of "cankey," made of Indian corn, is applied over the blistered-like surface at which the worm appears; and if an abscess is present and points they open it either with a needle or a razor. A coarse powder is likewise made by pounding the leaves of certain plants, a portion of which they take into the mouth, and eject in the form of a thin jetty spray over the part. At other times this powder, which is of a yellowish white colour, is mixed up with water, and daubed over and around the opening through which the worm protrudes. Fresh chalots are also pounded, and fastened over it; and this application sometimes breaks up the worm, or causes it to be more readily extracted. They secure the worm with a thread, which they either wind round the part, or knot it, to prevent its retraction, and attach a small weight, as a piece of lead, to the free end of the packthread. Some persons wind it round a small piece of stick as it protrudes, doing this daily, or when the worm relaxes. No internal remedies are taken by them, but they spread palm oil over certain leaves, and apply them over the wound. In most instances the legs and feet are the seats of the disorder; the only part of the body which seems exempt from its invasion is the hairy scalp, and in that position it has never been seen. Several persons have been known to have thirty worms in their bodies at one and the same time. My friend, Surgeon-Major E. A. Brien, reporting last year (1858) on the prevalence of guinea worm, remarked that the men who slept on mats on the floor of the barrack-rooms of Cape Coast Castle were constantly attacked with it, but that upon beds and bedding being issued the disease gradually decreased. In the treatment of guinea worm, the iodide of potass has been found serviceable, given internally in doses of five grains three times daily. It appears to destroy the worm, and its germs, and to hasten its expulsion. Tincture of assafoetida has also been administered, with a similar intention, but I am doubtful of much good being derived from its use, both on account of its volatile qualities, and from its quickly passing through the kidneys. In opening abscesses I have frequently found two or three worms inextricably coiled together, an occurrence fortunate for the sufferer, as they are in that case speedily got rid of. The worst effect of guinea worm is that of occasionally inducing permanent deformity of one or both feet, when it takes up its seat in these parts, for it gets so twined about the tendo Achillis and tendons of the feet, and excites so much inflammation that they not unfrequently become permanently

In 1859. Parasitic diseases gone side to nearly half the admissions into the Military Hospitals on the Gold Coast. They were all caused by Guinea worms, of which no fewer than 70, came into Hospital while only 2 occurred at the Gambia, and 9 at S. Leone. Vide Rep. Med. Dept. p. 89.

flexed and contracted to such an extent that the person treads solely upon the cushion of the foot and toes, and walking is a work at once slow and difficult.

In Aquapim, and in some other districts, where water is abundant and good, in streams, wells, or springs, guinea worm is unknown, but when the inhabitants of this district visit the seaboard on business it frequently attacks them. Inland it is not found where there are running streams; but wherever the water is stagnant, and procured from the ponds before referred to, there the guinea worm is sure to prevail. Along the sea coast, from Appollonia to the Rio Volta, it prevails, and the people, as just stated, are often miserably maimed by it. On the opposite shore of the River Volta the people obtain tolerably good water by digging holes on the sea beach, often not three yards from the ocean, yet they are never attacked by guinea worm.

I have known several European officers and other whites have guinea worm in their feet or legs, or in other parts of their bodies; one of them having been attacked with it in one of his legs several months after he had returned to England.

I was called upon to attend several women in lingering and difficult labour during the past year 1858. I generally found an aged woman acting as midwife; but the patient was also cheered by the presence of numerous male and female friends, and although I readily induced them to leave the room, they returned to console her as soon as I had left the house. Parturition in the native woman has been generally represented as an easy process, and soon accomplished; but my observation is quite opposed to this opinion, for they suffer as much during child-birth as the female of civilised countries, and unfortunate cases have happened where the woman has died undelivered. Instrumental assistance is as often required; and some of the worst cases of laceration of the perineum, prolapsus uteri, and even laceration of the soft parts, to such an extent as to lay the vagina, bowel, and neck of the bladder into one common cloaca, fell under my notice in the course of my residence at Sierra Leone and the Gold Coast. x The native midwives never think of supporting the perineum. They sit in front of the woman, another female placing both her hands against the patient's sides to support them. They do not support the back, because they suppose that if they did so, the child's eyesight would be injured. In slow and lingering labours, some of the midwives give a paste made of the tender roots of the Papua tree (*Carica Papaya*) and the kernel of

x. I have known some of the native
midwives snip the perineum. No

the palm nut, fomenting the belly with decoctions of okro (*Hibiscus Esculentus*), and other mucilaginous plants. They also cause her to walk about the room. In difficult labour, she generally calls to her aid another woman of the same craft; and if delivery is still unaccomplished, the assistance of the surgeon is then requested. Should the placenta be detained, the patient is directed to retain her breath, or to blow strongly into a bottle, or into her hand. Sometimes they lave the abdomen with cold water to constrict the womb and cause the placenta to separate. Occasionally, they tickle the throat to excite vomiting and the desired uterine contraction.

Women dying undelivered, are buried in the sand beach; and in some of the remote parts of the country, their bodies are thrown into the bush, to become the prey of the jackal and other wild beasts.

Amenorrhœa, dysmenorrhœa, and leucorrhœa, are complaints just as common to the negress as European females; but hysteria rarely occurs among them. I have also met with ovarian enlargements, generally in women who had never borne a family.

Abortion is sometimes practised. In a case which occurred a few years ago, it was effected by introducing into the womb a piece of pointed stick upon which certain country medicines had been smeared, and thereafter administering a draught composed of the same drug. Labour came on in two hours, when she was delivered of a dead child. She died a month after. In another instance, a woman in a respectable position had become pregnant; and, dreading the loss of her appointment, she applied to a Fetish woman at Animaboe, who, after much persuasion, and a promise of a fee of £3:12, consented to her earnest entreaty, and administered a draught which immediately caused vomiting, succeeded by severe pains in the belly, when collapse came on, and she died six hours after taking the dose. The preparation used in the second instance to induce abortion was made from the leaves of the plant "*Emboo*," and the bark of the "*Cola*" tree. An enema was made by rubbing together and strongly expressing the juice of the leaves of the "*Emboo*" into about a pint of cold water, into which a small quantity of the powder of Cayenne pepper was put. This was administered about six o'clock A.M., and it soon after acted freely on the bowels. The woman then washed and anointed her skin, when a dose of the bark of the cola tree was given her. The bark was finely ground into powder, mixed with a wineglassful of lime-juice, and drunk off half-an hour after the injection had been

given. Sometimes the enema is repeated, and the cola powders also are given for two or three successive mornings, until the desired effect is produced.

Abortion is also sometimes resorted to when a woman who is suckling becomes pregnant, because of the injury done to the baby at the breast, and because generally they are too poor to rear the child upon spoon-meat.

Among the natives of the Gold Coast, a sterile woman is a reproach, and the birth of children is most earnestly desired; and several instances have come to my knowledge of well-educated natives consulting fetish practitioners to remove the cause of barrenness, by means of medicines and various charms—a consummation sometimes happily attained by a change of habits, but which is almost invariably ascribed to the power of the drugs of their country doctors.

A case of child-birth occurred in the colonial hospital in the early part of September 1858. The mother, an Ashantee refugee slave, was then delivered of a female child. Immediately after its birth, the skin was first carefully scraped with a knife, and afterwards scrubbed with dry sand, to remove the natural unctuous coating spread over it, when the infant was washed. These proceedings occupied an hour, and were performed in the open air.

During the whole period of my service in West Africa, no instance of hydrophobia occurred, although hundreds of half-starved mangy curs patrol the streets of the towns and villages on the Gold Coast, and at Sierra Leone.

Great difficulty is experienced in rearing European children. They, in general, thrive admirably until teething begins. It is at this epoch they are frequently harassed with intermittent fever, which, by repeated occurrence, causes enlargement of the spleen and functional disturbance of the stomach and bowels, when they soon become cachectic, and unless removed to a more genial climate, drop into an early grave.

Europeans some time on the coast are very liable to boils, which are very troublesome, appearing in crops upon the scalp, back of the neck, shoulders, and extremities. These inflamed indolent tumours vary in size from a small pea to a walnut; they suppurate slowly, and contain matter of a cheesy consistence.

With regard to health, strong opinions are generally entertained in Europe as to the insalubrity of the Gold Coast; but it is a well-known fact that many Europeans either forget or neglect the necessary precautions to preserve it, and frequently allow themselves to fall into excesses which the best constitu-

tions could not bear with impunity in Europe. The climate has been made the scapegoat of a thousand sins, and it has obtained a bad reputation, which, with all its faults, it certainly does not merit; the climate being quite as favourable, or even more so, than others in the same latitude, to European life and health. At all events, good health may generally be enjoyed by judicious attention to a few simple rules. In the foremost rank should be placed temperance, with regular and industrious habits. European residents on the Gold Coast are too often satisfied with wearing apparel suited to the climate, overlooking the fact that exercise in the open air is just as necessary to preserve health there, as it is in Europe. Many of them likewise entertain an impression that the sun's rays are hurtful, whereas, in nine cases out of ten, the mischief is done, not by the sun's rays, but by errors of *personal economy*. Feeling sadly the wearisome sameness of life upon this part of the coast, recourse is too frequently had to stimulants, instead of resorting to inexhausting employment, the only safe and effectual remedy against an evil fraught with such lamentable consequences. Europeans also bestow too little attention upon ventilation, far more harm being done by breathing close and impure air during the night than is ever brought about by exposure to the night wind. Indeed, there should be the freest circulation of air in the bed-chamber, and this may be always managed without subjecting the body to draughts. Out of doors the head should be protected from the sun by wearing either an umbrella over it, or by winding round a hat of light fabric a piece of white calico or red taffety, according to the pleasure of the wearer.

Great attention to keep the skin clean contributes much to preserve health in this climate, but the present scarcity of water prevents a bath, properly so called, being taken, the substitute being a careful washing of the skin on getting out of bed in the morning, which, however, answers very well. Some Europeans bathe in the sea, washing off the salt water thereafter, a practice also in use among the natives. It is hardly necessary to recommend retiring early to bed, say nine or ten o'clock, and rising early, say six o'clock, when a cup of tea or coffee should be taken. Indeed, it is not only a matter of choice, but of necessity, to get up early in the morning, as a great deal of business must in general be then dealt with, which cannot be postponed without loss of time to a later period of the day. The bed-room should be the largest and best-ventilated room in all the house, and during the "smokes," or foggy weather, fires should be burnt in it, to keep it dry and whole-

some. Piazza bed-rooms should be avoided. In my opinion, a very great deal of the suffering and disease constantly met with among Europeans in this climate is occasioned, as elsewhere, by over-feeding, which, as well as over-drinking, has consigned its victims to the graveyards of these settlements, sobriety as regards eating being quite as necessary to preserve health as temperance in drinking. A fair proportion of animal with vegetable food is as necessary to support and preserve the body in good health on the Gold Coast as in Europe; perhaps, even more so, because the powers of life are lowered by the influence of the climate. Good wine and bitter beer may be moderately partaken of, not only without harm, but with the advantage of fortifying the system. Above all, the mind should be kept cheerful, and as free from despondency as possible, with a firm reliance on the goodness of Providence; for nothing is more fatal to health and life in this climate than mental harass, and unfounded apprehensions of the climate. Formerly many officers in the English, Dutch, and Danish service, resided some fourteen, twenty, and thirty years in these settlements, and enjoyed good health, although those in subordinate positions had to undergo removal from one station to another. Besides, there is the fact, that for officers in the Dutch service the shortest term of remaining on the Gold Coast is six years, unless obliged to invalid before that period expires, and I understand that few of them require to return sooner to Europe to recruit their health. The annexed return of deaths which occurred in the Dutch service from 1st of January, 1851, until 31st of December, 1859, inclusive, will show that a large proportion died of disease not endemic to this part of the world. I may mention that this return was handed me by an officer of high rank, and that it is carefully compiled from the records of St. Jorge del Elmina. It is proper to state that the number of Dutch white officers serving on the Gold Coast generally averages 17.

In and about all the sea coast towns on the Windward coast walking is the only exercise that can be taken, as horses and other beasts of burden only live for a short time; but in the Leeward districts, where horses thrive admirably, equestrian exercise can be enjoyed, and health greatly improved by a daily ride over the fine pastoral country in the vicinity of Winnebah, Accra, Christianborgh Castle, and Pram Pram; and there cannot be a doubt that the advantages resulting to health from the face of the country being formed of vast undulating plains, covered with grass, wild flowers, and clumps of trees and copsewood, tells most favourably to European life,

when contrasted with the dense brushwood which generally prevails in the neighbourhood of the coast towns of the Windward districts. The country, however, about Elmina is for the most part more open and flat than that of Cape Coast, and horses generally live for a longer period at the former than at the latter station. A great deal of the land, however, lying to the west of Elmina, and in its immediate vicinity, is low and swampy, the ground being, moreover, broken up by naturally-formed ditches, into which the surface water drains during the rains. Elmina Fort is built upon the margin of the sea, and is situated at the embouchure of the river Byham, which admits vessels of light burthen, at high water, to load and unload under the walls of the castle. The apartments of the officers in the fort are, in general, much confined, the admission of air being, to a great extent, interrupted by the high walls which enclose them.

Notwithstanding the disadvantages just referred to, there might be many pleasant walks in the immediate vicinity of the towns in the Windward districts, if trouble were taken to keep the roads clear of bush; a benefit which could be attained at a trifling cost, but which would confer on the inhabitants the means of enjoying the healthful recreation of walking on roads unencumbered with weeds and unpolluted by filth.

In the time of sickness the want of female trained nurses is seriously felt by Europeans in these settlements. There are no nurses, strictly speaking. It is true that an aged woman, who understands English imperfectly, is sometimes got to look after the sick, but her attendance is considered rather as a favour, and she seldom remains beside the patient all night, as she generally then returns to her home, leaving the sick to be tended by male servants totally unqualified to undertake that duty. Should she, however, remain with the patient, her infirm health obliges her to lie down; and she, in fact, is of little use, except to get some soup or other article of food prepared. Numbers of the native women could, however, be found, who would gladly and cheerfully do all the numerous kind offices required by the sick, if they were not debarred by being unable to speak English. This inconvenience might be remedied by having two middle-aged women of good character as hospital nurses to tend the sick. Under proper management they would soon become familiar with their duties, and in case of sickness would be invaluable attendants upon the European officers and Europeans generally, when afflicted with disease of a dangerous nature; and from the well-known strong imitative qualities of the natives, there would soon be

enough of women found to act as nurses, provided they were liberally and fairly remunerated for their trouble. They should be compensated at a fixed rate, as unless this is done it would occasion much trouble both to the patients and to the nurses.

With regard to the classes best adapted to resist the climatorial influences of West Africa, the negro race, undoubtedly, hold the first rank; but it is questionable whether persons of colour are better able to bear up against its effects than persons of pure European blood, provided the latter are sober in their habits. There can be no doubt that Europeans upon their first arrival in West Africa are in greater danger of losing their lives than the former; but when once they have become acclimated they seem generally to withstand the influence of the climate better than the coloured people, provided, I repeat, that they are temperate in their habits.

In conclusion, it may be thought that I have dwelt too minutely on some of the subjects; but as a vast proportion of the diseases which afflict the population are, in my humble opinion, preventible, I dared not hang a drapery over naked facts, however unsightly, or conscientiously soften them down more than truth seemed to exact, my only object being to show how much may be done to improve the health of the people of the Gold Coast, and so mitigate human misery by removing evils the fruitful parents of disease and death.

TABLE

Showing the average Range of the Thermometer at Cape Coast Castle during the Year 1858.

	Remarks.	Max.	Min.
January	Harmattan wind throughout	84°	79°
February	1st week fine; 2nd, thunder and lightning. Heavy rain once	86	83
March	Mostly fine. Rain twice	85	83
April	Two tornadoes. Frequent rain	87	82
May	Two tornadoes. Heavy rain	85	75
June	One tornado. Frequent heavy rains	83	78
July	Uncertain, and light rains frequent	79	74
August	Overcast and mild. Slight rains. Latter part fine	79	74
September	Alternations of fine and rainy weather	81	77
October	Early part fine, then rain. One tornado. Latter part fine	84	79
November	Two tornadoes. Occasionally rain and westerly breezes	86	81
December	One tornado. Fine rains and moist. Westerly; fine and hazy	—	82

The thermometer suspended against the wall between windows looking south by east.

During the months of March, April, May, and June, the barometer ranged as follows:—29.90 in. to 30.05 in., or little more than the tenth of an inch.

There was no opportunity of observing the rise and fall of the barometer for the other months of the year, because the instrument from which those observations were taken did not arrive in these settlements until the middle of last February.

Prevailing Winds observed at Cape Coast during the Year.

December, January, February—The Harmattan, an east-north-east wind, and south-westerly winds. Land winds at night, varying west-by-north to north-north-west. Tornadoes occur in March.

April, May, June—In the early part of the morning north-westerly; during the day south-westerly to westerly. Tornadoes in April.

July, August, September—Westerly and south-westerly winds. Land wind seldom blows during these months.

October, November, December—South-west breezes from the sea, with land winds from north-west.

The line of coast is generally washed by a terrific surf in the months of May, June, July, and August, but the ocean is often very rough for days together in March and the other months, boats and canoes being at such times prevented from putting to sea. While, however, the Harmattan wind prevails the sea is calm, and the industrious fishermen can at that season ply their vocation with safety, whereas at other times they are exposed to be overtaken by the storms and gusts of wind which are then so apt suddenly to appear in these latitudes.

Observations on the Etua Tree (Kiglia Africana).

The tree, called by the Fantees "Etua," is found growing in several districts of these settlements. It attains a height of eighteen feet or more. The fruit, which is, in its transverse section, of an oblate shape, hangs from the tree by a rounded cord-like stem, sixteen and a half inches long. The length of the fruit is sixteen and a half inches; circumference, in the centre, eleven inches, and at the upper and lower ends ten and half inches; while the diameter is three inches and three-fourths. A tough greenish brown rind, with dark spots, encloses the

fruit, which closely adheres to the cortex. A vertical section shows that the closely-grained nearly dried fleshy fruit is of a reddish brown colour, the seeds being imbedded in a fibrous and tenacious substance. In taste and flavour the fruit is strongly but not unpleasantly astringent; the rind less so; but the bark of the tree is strongly astringent; and I feel satisfied that the bark of the Etua tree will be found a medicine of great value in the treatment of diarrhoea and dysentery. The negroes esteem it as a sovereign cure for dysentery, and have done so for countless ages. On the Gold Coast the fruit is fetish, and is employed by the wily fetish men and women as a charm. When it is so used, the fresh fruit is painted in alternate stripes of red, white, and black. The colours are composed of ochre, chalk, and charcoal. Thus prepared, the fruit is transfixed to the earth, either in the pathways, house, or about the house of the party who consults the fetish man or woman, as may be directed. Sometimes the fruit is painted entirely black, and then dotted all over with red and white spots, when it is used in a similar manner. The ceremony is an invocation to the fetish to discover the remedy which is suitable to cure the disease of the person seeking advice from the fetish man or woman.

Return of the Causes of Death of Twelve Officers in the Dutch Service upon the Gold Coast in the eight years from 1st January, 1851, to 31st December, 1859, inclusive.

Disease.	Period of Service.	Remarks.
Phthisis Pul.	3 years	<i>See above.</i>
Inflammation of stomach	18 "	
Dysentery	4 "	
Dropsy	14 "	
Constipation	4 "	
Dysentery	13 "	
Dysentery	3 "	
Rheumatism	3 "	
Arthritis	12 "	
Suicide	4 months	
Fever (Cerebral)	3 "	
Rheumatic fever	6 "	