W. W.

1861

Short Sketch of Scene Scene

with Chief Officers.

Henry N. Schmeideker.
25th May 1861.
Edinburgh.
Brief Remarks on Sierra Leone and its Levers

A sketch of Sierra Leone with chief occurrences.

Henry B. Schreuder.
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Sierra Leone, a British Settlement on the West Coast of Africa, has since its first occupation by the English in the latter part of the last century, been deserted, and justly so, on account of the unhealthiness of its climate. It does not strictly speaking belong to England, but isrented from the neighbouring tribes at an annual rent of Twenty Pounds. In shape irregularly quadrilateral, its most northerly extremity is narrow terminating in a cape—namely Cape Sierra Leone. The Southern extremity is more rounded and divided from the main by a fordable creek. Its length is 24 miles and its breadth is about the same.
Population is now or less fluctuating, but at the beginning of the last epidemic the resident population was about 40,000. Of this number more than half live in and about Freetown, the chief town. The number of resident Europeans at this time was 240. This excludes the shipping, the landed crews of clippers, and runaways, of whom there are always a large number.

Climate. Goye Prince Stone is 8°30' N. lat 13°18' W. long. It will thus be seen that the colony is placed most unfavourably as far as climate is concerned.

Situated between the Equator and 10° N. lat. 10° S. lat. the "zone of variable winds and calms" the same zone being that of "Frequent almost constant precipitation almost always accompanied by Electrical Phenomena." The White man however temperate, however regular in habits has but small chances in his favor when contending with such circumstances should even Malaria not be present.

Rains. The rainy season commences in May and terminates in September. Heavy Showers occur in and terminate the season. June and August are wet.
are generally the hottest months. The annual rain fall is 189.69 inches. This may seem enormous to persons not acquainted with tropical rains. I myself carefully measured the rain fall every 24 hours for 12 months and can answer for its accuracy. The rain fall on one day (i.e. 24 hours) in August 1860 was 6.4 inches, more than one fourth of the annual rain fall in Edinburgh of 24 inches be the amount, as stated in the local guide books. This is the sickly season and the most violent and fatiguing attacks are at the commencement and termination. The sun breaks out occasionally for a few hours but not every day. when it does, it shines with a brilliant almost scorching intensity, and at these periods a "steamy" evaporation arises, loaded with as heavy earthy odours causing headache and great lassitude.

The Dry Season commences at the latter end of September and lasts until the beginning of May. Occasional showers fall but are not frequent. Heavy dew are prevalent at night, and the fall of the Thermometer even for a few degrees is acutely felt.

Harmattan, an Easterly Wind, prevails generally from December to February, it may however be much earlier and even a little later. Its duration is variable.
variable, blowing sometimes for a fortnight or three weeks, sometimes only for a day or two, then lulling; when it blows regularly, the sky has a peculiar gray glow, evaporation is intense, the skin dry and harsh, the lips chapped, and the whole system feels out of sorts. Some new animals seem to enjoy the cold, but a person, one season in Africa, cannot. Animals are uneasy and restless. It has, however, its benefits, it checks Malaria, and fever. At the other periods of the year, Land and Sea breezes prevail generally. The Sea breezes commence about 10 a.m. The Land, shortly after sunset. This latter is very unhealthy coming as it does from the River and Mangrove Swamps.

Temperature. The mean daily temperature is 78.5°F.

Ozone. Until August, 1860 there were no means for testing Ozone papers or ozone sent out. In August both morning and evening the test papers always showed its presence, and on one occasion a much deeper colour than No. 10 of Rapallti and Gamba's test card.

Vaccination. I may here add that Vaccination is impossible during the rains and it can only be successful during the dry season and then when the
the Harmattan is not blowing. There had ample opportunities of testing this. Points Jukul-Crusts are sent out every month from the Vaccine Establishment, and although every care was taken, they all failed. In several instances success seemed probable, but on the third day all hope was lost. I may add that I always found small sores much better than punctures.

**Geology.** The formation is almost Haematite; a few granitic masses crop out on the west; the Haematite is of both kinds—the Red, and the Brown. The Red is very pure and contains a large quantity of the Magnetic Oxide in crystals; some of this Red was sent to England, where it was pronounced equal to if not better than Swedish, but the cost of transport precludes its use. The Brown is used as building stone.

The Proc formation tends to corroborate the observations made in East India. "That in villages as built on Proc stone, the prevailing fever is Remittent.

In Sierra Leone, the prevailing type all the year round is undoubtedly Remittent. Even Haumante fever, Delirium Tremens, take on a Remittent form. I give this not only from personal experience, but from that of others.
Feetown. As the residence of all Europeans with the exception of a few Missions its may be as well to give its position. Situated on the left bank of the river, the same bank making a bend nearly at right angles. Part of the town faces the N. or rather N. W. The other part pretty well due E. A mile behind the town is a mountain ridge commencing about half a mile from the water's edge running due N. for about three miles, then making a sharp turn and running W. N. W. terminating in the Cape. Seven miles in a direct line from Feetown (i.e., the base of the angle) leaving a large flat plain only broken by a square hill apex about 300 feet above the sea level on which the barracks are built. The town is built on the American plan, the streets at right angles, nearly every house separated and in its own plot; the houses of the better classes are of stone with modern playing, the poorer ones of mud or tempered mud the latter thatched with palm leaves. To the west of the town lies a fertile peninsula nearly round, about a quarter of a mile in diameter, with two muddy creeks on each side of it. Behind this peninsula is a large plain extending to the foot of the N. N. W. range of hills covered with grass in the dry season and covered with water in the wet. To the south the barracks hill and the above...
above named ridge. To the East, the river about three miles broad... To the North, the Mouth of the River with its bar, the opposite Bank, and a small portion of the Atlantic... It will be observed that the town is shut out, in a great measure, from the sea breezes by the Mitered range of hills and it has also two small creeks to the West, and a good portion of the town is exposed to the breezes coming down the river.

Food and Natural productions. The Colony is that of Tropical Africa, the chief productions grown in the Colony are Cassada—the sweet variety largely grown; Ginger, Arrowroot, Yams, Coffee, the latter small but very good, Palm Oil, etc. Indifferent beef, and mutton is brought from the Main as well as excellent Rice. The chief food of the Natives is Cassada made into a kind paste called "Koko" and eaten with Palm Oil and Rice boiled with Palm Oil and dried Fish. The latter with an amount of green peppers as side gray. Negro pepper is the favourite dish.

Water. The best is from running streams, that from wells not so good. Nearly the whole town is supplied by one stream at least for drinking. The battery houses have all filters. The barracks are supplied by a stream...
stream behind the hill in the rains and in the dry rain water stored during the rains in large tanks.

On my arrival in Freetown, on 10th May 1857 I found the colony in intense alarm. The sickly season had commenced—fevers and dysentery had prevailed to an awful extent in Fernando Pondo and in the Gulf of Guinea and Gold Coast and had made its way up to Freetown. These had not had an epidemic since 1847 and from the variable and unusual characters presented by the preceding rainy and dry seasons and the late arrival of the Harmattan, so early in January, those acquainted with the colony predicted a worse season than had ever occurred before; and in the end their prediction was fulfilled. In addition to these, smallpox was raging. Burials among the Natives were taking place at the rate of 30 per day. The smallpox hospital was filled, and among the Europeans the Spanish influenza was just dead with symptoms of yellow fever. The Colonial Surgeon was supposed to be dying of fever disease and was with great difficulty carried on board H.M. Ship Perseus—thus leaving only three Surgeons in the colony, namely a private practitioner, whose health did not allow him to practice actively and two military.
Military Surgeons, Staff Surgeon Abbott and myself. The Colonial Government immediately appointed Mr. Abbott Colonial Surgeon and myself as Assistant, which office I held until February 1860. In the first three months I had sole charge of the Military and Colonial Hospitals and Jails as well as the Lunatic Asylum. Small pox Hospitals and Slave Yards, the three latter situated 4 miles from Freetown. During the latter months I visited the Colonial Departiments on alternate days.

These diseases of Africa or at least on the West Coast, are par excellence fevers. As I am only speaking of Sierra Leone I shall confine myself to them.

The ordinary fevers of Freetown are divisible into two kinds, the Remittent and Intermittent. The former is the prevailing form and occurs at all times and seasons of the year. Intermittents are not so common and prevail more among the native population. The Remittent is not so fatal as formerly generally speaking but at uncertain intervals it becomes Epidemic and very fatal. So that the Remittent may be divided into Epidemic and Epidemic; and when Remittent fever prevails epidemically I believe a third form of fever is also present for as far as my experience goes I believe yellow fever to be a distinct form. The reason Remittent
Remittent fever was so fatal formerly that Surgeon Lawson now Deputy Inspector, says was on account of the enormous amount of Mercury always exhibited, and the late period, when Park, M.R.S. was given to say nothing to the almost universal practice of bleeding. Dr. Lawson was appointed in 1845 at his own request to the coast station and acted as principal Medical Officer for several years. He is a very scientific man, very fond of meteorology, and introduced a regular system of observations but not so perfect as they are now conducted at Sierra Leone. He also introduced the Quinine treatment and quite abandoned the Mercurial and Bleeding. His reports to the Acting General on the Diseases of the coast are most instructive and would be valuable if made public.

Intermittents are as I have before stated, more common among the Black population; Europeans are certainly often attacked, but always after exposure. Our debilitated Europeans exposure to the sun more than usual, a debauch, or spending the night in a boat, is almost sure to bring on a slight attack which may be cut short by Quinine, but only to return when subjected to the same exciting causes. A smart attack however rarely remains of the same type, it is sure to become remittent or at least...
least assume a type distinctly belonging to neither one nor the other. All African fevers seem to have this peculiarity, i.e., of changing their type. Thus a common lymphatic of today may become a Remittent tomorrow and perhaps terminate in an Intermittent. In the natives it is not difficult to cure. A smart saline purgative given when the patient is warm, and, when the bowels are opened, quinine or quinidine every 4 hours after, soon cuts it short.

Quinine. Most residents have a habit of taking a dose of quinine every morning measuring it out by "rule of thumb" and as Howard's Quinine Bottle is as much part of the side board appendages as the Water Cooler or Bank. I must say I think this abuse, and found that it did not act so much as a prophylactic as I should have supposed. But on the other hand when persons who were not accustomed to its daily use were employed in the rivers, either as traders, or on duty and took a morning dose, they certainly found its benefit, if they did have an attack they were more quickly cured. One symptom of Quinonism occurs in Sierra Leone so remarkable that I am tempted to insert it, more especially as I have never seen it mentioned in any work on Malaria Medicine. Dr. Lawson was the first to notice it and had
had I not seen it mentioned in his Letter, to my knowledge, I should have been at a loss. My first case was a negro coloured Lawyer of Antigua, he had risen in the morning early, felt well, but found himself attacked by a complaint, i.e., Remittent fever. He took immediately a large dose of Quinine on the end of a knife; this he repeated several times a day, in the evening. I was out for, and found him in an intense state of anxiety; his countenance full of terror, eyes staring, breathing intensely hurried. He complained he could not get air, pulse quick but small, skin dry and hot. I immediately told him he had overdosed himself with Quinine and applied Dr. L's remedy namely a large mustard plaster over the chest and had the satisfaction of seeing my patient calmed down and the breathing regular in the course of a short time.

Remittent Fever is the Fever of Sierra Leone and the remark has been frequently made, that men in timber ships who have contracted Intermittents in the river, who are told on shore being brought into Sierra Leone for treatment, that the types changes and a Remittent form has set in. It prevails in different degrees of intensity according to the season of the year, and modified according to the state of the constitution of the individual attacked. It is always
always more severe at the commencement and termination of the rains. Milder in the middle and the Dry season. Some individuals have a sharp attack and are soon well, others have it hanging about them for weeks. I must say I am convinced that Quinine alone will not cure it, but alternations are required, such as mild doses of Rij Powder or Blue Pill every 2nd or 3rd night in conjunction with compound salicylate. Also that Quinidine in union with Nitric Acid (it is better than Quinine and Sulphuric) was led to use Nitric Acid as so much has been paid about its use in East Indian liver complaints. The form of Quinidine I prefer is Varney and Moore's solution. In the Military Hospital the men much preferred it to Quinine as it gave them less headache. I have always found they got well just as soon as the others. I also tried it extensively on the Missionaries as well as taking it myself. Every one agreed the headache and tinnitus aurium was much less, and it seemed as efficacious.

Epidemics. At uncertain and distant periods this fever assumes an aggravated and more fatal character and at such periods Yellow fever makes its appearance. At such periods it commenced in the usual form namely the Mild Endemical, followed by...
In my opinion, Yellow Fever is a distinct disease although I readily admit that it is impossible to diagnose.
diagnose it from common intermittent fever at the outset. All persons who had yellow fever either in a mild form and recovered, or in a fatal form, had the same smell, the same hemorhage, the same coffee ground like vomit, and the same characteristic smell as that emanating from the skin but greater in degree, and the same defecation. Very many cases of Remittent fever and fatal ones had the same yellowness or blueness of skin in common with Yellow fever (the tints of the skin in Yellow fever is not always yellow) commenced in the same manner, but had neither the peculiar smell, the hemorhage, nor the vomit. The fatal cases in Remittent were all violent, attended with more or less delirium; many Yellow fever cases had no delirium until the last. Many authors state yellow fever to be an exacerbated form of the common endemic remittent. In this opinion I cannot agree.

Yellow fever as far as my experience goes, occurred in Sierra Leone in two distinct forms. The one in spare, female fanned persons apparently unable to resist the climate. The second in robust, powerful men and women for the most part, but there were many cases equally spare and thin as the first mentioned who exhibited much the same symptoms towards the end, namely violent delirium & coma.
three of them were cliches in one house and year. Three more of the first form unfortunately only four cases. The headache is not so severe in the first form and only in one case was there any delirium. The pains in the calves of the legs and back were complained of in the first form as much as in the second. The vomited matter equal in quantity in three of the first as in any of the second, the same appearance and smell, the hemorrhage in both forms equal and from the same outlets. In two of the first form a peculiar unnatural calmness, the face quiet and composed, pulse not much quicker than natural, skin rather clammy. These two cases of the first form had something unearthly about them. Both lay quiet in their beds, answered questions when spoken to, but volunteered no remarks, took food or medicine without any hesitation, every now and then vomiting a quantity of black vomit as calmly as if it had been water. Neither appeared to have the slightest fear of death and with great reluctance settled their affairs. The first case was a Mr. Frame engaged an Agent for a Manchester House, he had taken a trade trip but was obliged to return home on account of illness. This was the second case of black vomit in the colony, the first Mr. San Beriko the Spanish New Consul died.
I think on the 21st of May, his case was certainly the result of local causes. He lived in a small house up the left bank of the river about 2 miles from town, close to the water edge, and not very far from a small swamp, certainly not half a mile, and his house in addition was fully exposed to every breath of wind coming down the river. He was 63, I believe, a temperate man as most Spaniards are, but I cannot give any details of his case. W. Home was a small thin man, with intensely red hair, and very thin translucent skin, in habits rather temperate than otherwise. He was treated with Quinine and Calomel grijs every four hours. Mercury, ointment only once, well rubbed into his thighs and well supported with beef tea and Champagne. He made a very good recovery and was in England a short time ago. The second case was one of my own, the wife of an officer of the 2nd Delhi Regiment. In temperament, build, and general appearance much as the last, she had very little Mercury given her, and that only in the shape of Guy Powder. Her symptoms commenced in the usual way. Had however Quinine exhibited every four hours and plenty of liquid nourishment with wine, brandy, etc. The lady had only once "black vomit" but had on
the other hand violent haemorrhages and on one occasion I was uncertain whether I should not plug the nostrils. She was delirious for 3 days but ultimately made a fair recovery although a perilous one. The third case was a German sailor named Haase; his symptoms were much those of Mr. Harris: he was treated the same way. I should have mentioned the bowel of each of the two last men was opened daily either by castor oil or infusion and here I with due deference think that men longer in the profession and no doubt more experienced feel gently on. Amaranthine one is told the bowels are freely open, and one is shown the usual defecation looking like stout jocket up porter, not like the coffee ground like vomit. The lady above referred to on the third day made such objection to the oil that I allowed an injection to be administered. It brought away a number of strybola. The same thing occurred in every case. I had an opportunity of trying it consequently I am resolved in future not to trust to nurses etc. I do not think that due attention is paid to the bowels. The Natives' method of treating Yellow fever is to deluge the patient with castor oil and an infusion of a small plant called by the Natives Yellow fever bush. (It is a small species of Euphorbias with rather fuce coloured leaves growing on the sides of roads and gravelly places.) It is slightly diuretic but...
but it did not act much on me when I tried it. This treatment is decidedly eliminative. I think it warrant enough so far as it goes, but no provision is made for supporting the system. The third case was that of a black-man, a private, named James Johnson I Meet In India Regiment; he was admitted the previous evening with symptoms of common Remittent Fever. He had a saline emetic given him and was sent to bed; at half past six next morning I was horrifed on opening the Ward to smell that never to be forgotten Yellow Fever smell. I found he had been vomiting the greater part of the night, he was apparently in articulo mortis with an apparent of true Black vomit by his side. He either would not or could not speak; knowing the effect of warmth on a Negro and the Copper being fortunately full of hot water I had him put in a warm bath. To my astonishment and delight he called, bent himself down and drank a large quantity of hot water which he immediately rejected; this he did two or three times. He was placed in bed with hot bottles to his feet andUmpits, well covered up, and a glass of hot port wine given with grog of Quin in it was given him. A pro fus perspiration broke out and the man himself said he should get better. This was a great admission as a Negro if he once "julks" as it is called in any disease is almost sure
to die. Baking and Brandy with plenty of liquor nourishment with injections as well as blister oil was the treatment adopted and he made a very good recovery.

Of the other form I have little to say. Its symptoms were much the same as described in Books. It was former Epidemics now that were blotted out. For the Arm, on many occasions, bled to the last, the openings in the veins remaining putridous and never closing. In this Epidemic several were locked on the temples and the ulcers oozed until death closed the scene. In both forms the colour varied from a bright yellow to a dusky blue. Spaniards and Frenchmen are generally of the latter, depending of course on the natural colour of the skin.

Only two cases of Yellow Fever in Natives came under my notice: the above and a fatal one in the Colonial Hospital. In 1834 Staff Surgeon Ferguson states there were three.

The number of deaths among the Europeans of Yellow Fever alone I am sure can not be accurately estimated as every death from Fever among the shipping was entered as Yellow.

With regard to that "vexed" question: Is Yellow Fever contagious? The opinion of every white man in Sierra Leone who was present during the former epide...
Epidemics was that it is not, and on the following grounds. Very many cases were isolated ones and the immediate attendants and friends did not take it. Francis' partner slept in the same house, his bed divided from Francis by a mere partition. Few houses in the tropics have the partitions running up to the roof in order to insure a free circulation of air. The lady in Banacks was attended upon by the Paymaster's wife, and the Mires of two Sergeant Majors all three white; they were not affected. Many similar instances can be quoted both in this and former Epidemics that the isolated and sporadic case remained so and the immediate friends and attendants were not affected. In the former Epidemics the fever never extended up to the Banacks, nor indeed to the higher parts of the town, although on one occasion there were 127 European soldiers in the Banacks and a free communication existed between town and Banacks. Again how did both the upper and lower town escape when \[ \frac{1}{3} \] of the plumpers crew of whom 28 died were treated there? Why did the fever confine itself so much to particular houses and ships? For example in 1884 in one house nearly every white person died of yellow fever; in 1864 nearly every white man in 12 died of Remittent Fever, and in 1849 every white man who resided in it or belonged to it as Clerk, but one, died.
died of yellow fever. This house belonged to a German firm. Ehrenhausen and Wagner; the latter was dead; the former an old man did not manage the business himself but lived out of the town. The survivor is Mr. Roemich who in business for himself. I have often heard him describe the whole scene; all blamed the house and did not think of contagion. The house last season was in the possession of a colored person named Joe and no deaths occurred. Again in the house occupied by the Rev. Bishop in 1837 nearly every clerk died this season the Bishop and 4 priests his assistants died, being every white man in it. This season the clerks in the form of Walker and Levi all died but one, Joe in humbled as well as a young man a clerk who boarded there for a short time. Certain ships were the same, one in particular the Nereid a timber ship so sure as a man shipped on board of her so sure was he to be brought into hospital with yellow fever; the only man from the Master down who did not die was the mate, he said his wife and remained on shore until a new master and fresh crew were found and shipped and the vessel sent off at once. She arrived in England without a single death I believe. The case in barracks in January 1860 was a Lieutenant J. Adams. He arrived in Sierra Leone on the 24th of December with a
price and a crew consisting of one midshipman and 13 men. He was very nervous and did not like the idea of coming to Sierra Leone much. At Harford the midshipman declared that he did not eat a single full meal on board the prize but drank a good deal. The prize was given over to the proper authorities and he took up his quarters in barracks. He did not then show any symptoms of illness and appeared pretty well. The crew were also in barracks as well. On the night of the 1st Jan a marine belonging to his party broke out of barracks, got very intoxicated and died in a fit. This frightened him much; the next morning he had symptoms of remittent fever. Black vomit came on and he died on the sixth day I think. Every officer in barracks was in his room. He was nursed by relays of his own men, but not one had the fever. In citing these cases I do not mean to deny the contagiousness of yellow fever, but I wish to prove that yellow fever is not so generally in Sierra Leone. The numbers dying in certain houses and ships prove that the boiling causes existed there in greater proportion. The Merchants' houses are always liable to fever. They are in the habit of keeping hides, large pits of cane wood, and food stuffs, heaped up in the store houses and yards. Every time
time the sun comes out the hides are brought out to dry, consequently a stench arises which must be very detrimental to health. I never could account for the unhealthiness of the Bishop's house; it is one of the best houses in the colony and at least 300 yards from the shore. On timber and coal ships there are always gases arising - new wood always undergoing a species of fermentation. Some ships are more unhealthy than others as in the case of the Eclair - after her arrival in England in 1845 she was rechristened and sent out on the coast as the Rosamond (perhaps to settle the point) and suffered severely from fever. She is now, or at least was a few months ago in No. 4 dock, Portmouth. With regard to that unfortunate ship, it is singular that there were no cases of Yellow Fever in Sierra Leone when she was there. Mr. Aitken, the Colonial Surgeon had two cases in August. The Eclair left on the 23rd of July 1845.

In concluding this sketch I beg to say that it was not my intention when I left Sierra Leone to come to Edinburgh, that I was made every endeavour to get all my cases in the Military Hospital and its reports as well as those of the Colonial Department copied and sent me.
(as it was my intention to write a brief description of the diseases &c. of China, done but have failed; partly on account of nature dictating and partly on account of the change of books.

 What I have said in the foregoing is correct, for the events occurring at that fearful time are too deeply engraven on my mind even to forget them.

Henry L. Escombe.

Staff Assistant Surgeon