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Contributors

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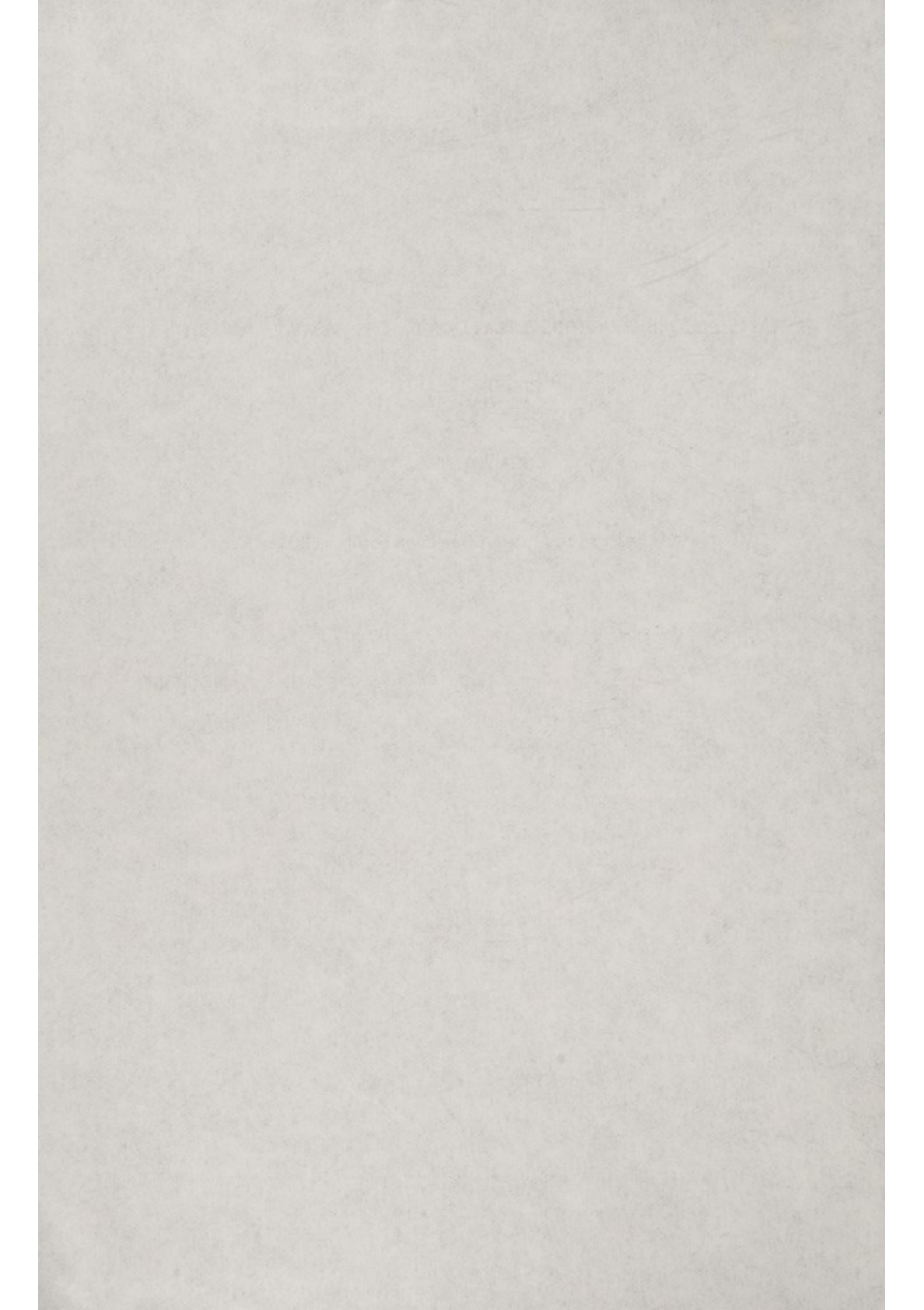


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SOME OBSERVATIONS RELATIVE TO THE CLIMATE AND DISEASES OF
SIERRE LEONE.

T.M.WINTERBOTTOM,

Medical Facts and Observations, 1800, 8.



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V. *Some Observations relative to the Climate and Diseases of Sierra Leone.* By Thomas Masterman Winterbottom, M. D. of South Shields, Durham; late Physician to the Settlement at Sierra Leone. Communicated in a Letter to Robert Willan, M. D. Physician in London; and by him to Dr. Simmons.

THE Settlement of Free Town, Sierra Leone,* lies in 8° 30' lat. N. and in long. 12° W. upon the banks of the large river Sierra Leone, or as it has been called by

* Sierra Leone has been supposed by some to receive its name from the lions with which it was infested; and by others from the tremendous roaring which the thunder makes in its mountains. Neither of these opinions however appear to be well founded; it may even admit of



No.	

V. Some Opinions relative to the Customs
 and Duties of Slave Labor. By Thomas
 Maitland Winterbottom, M. D. of
 South Africa, Durban; late Physician to
 the Settlement at Sierra Leone. London.
 Printed in London, and Sold in Dr.
 Sumner.

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by old geographers, the river Tagrin, or Mitomba, about five miles from the mouth of the river. The land about the settlement, when viewed from the sea, or from the opposite shore, called Bullom, appears like a number of hills, heaped one upon another, in a very irregular manner. On a nearer approach, the face of the country becomes more beautiful; the hills are covered to their very summits with lofty trees; and the lower grounds, which are cultivated, preserve, by means of the heavy dews which fall, a lively verdure the whole year round, which forms a striking contrast with the darker hues of the more distant hills. The entrance of the river is formed by two projecting points, one on the N. W. extremity of the Bullom shore, improperly called Leopard's Island, from its resembling an island when viewed at a distance, though it is actually connected with the main

of doubt if a lion was ever seen there, as the natives have no knowledge of the animal. I am rather inclined to think it owes its name either to the discoverer or to some person who resided there, and that it was called Sierra de Leon, or Leon's Mountain. This is rendered the more probable, as we find many parts of this coast still retain the names of the first Portuguese discoverers.

land:

land: the other, the S. W. extremity of Sierra Leone, is a low neck of land running out into the sea, called Cape Sierra Leone, and in ancient charts, Cape Ledo, or Cape Tagrin; sometimes also it is called the True Cape, to distinguish it from a head land about six or seven miles to the S. called the False Cape, from its being frequently mistaken for the other. The distance from Leopard's Island to Cape Sierra Leone, is about twelve miles; the river forms on the south side several fine bays in its course from Cape Sierra Leone, which all open to the N. W.; and on the S. E. side of one of these, called St. George's Bay (or Baie de France, by French Navigators) the settlement is situated. The breadth of the river decreases gradually till it reaches St. George's Bay, from whence to the nearest part of the Bullom shore, it does not exceed six or seven miles. After passing the settlement, the river continues to form on its south side several bays; at the bottom of one of which, about two miles up, called Foro Bay, is situated Granville Town, a settlement under the jurisdiction of the Sierra Leone Company, formed by the free blacks sent from England in 1787. The river preserves nearly the same
breadth

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breadth as at Free Town, for a considerable distance higher up, until about twenty miles above the settlement, beyond which it is navigable only by vessels of a small draught of water, it divides into two large branches, called Porto Logo and Bokell rivers, and into a smaller one, which from running into the Bullom country, is called the Bullom river.* The high land, from which the True Cape projects, is continued in a chain of hills which runs to the S. as far as Cape Schelling, forming part of the entrance of the great river Sherbro. From Cape Sierra Leone the hills, which are a continuation of the chain running to the south, run nearly in a W. N. W. and E. S. E. direction, becoming gradually higher, to that part of them which bears about south from the Island of Gambia, from whence they seem gradually to decrease in height. The echo which these hills return when a gun is fired, and the rumbling noise produced among them by thunder is very great, and has been noticed by all voyagers. From hence, they

* The tide of the river Sierra Leone rises about twelve feet at spring tides; during the rainy season it is very rapid, and flows about four or five miles an hour. It is high water at eight o'clock at full and change.

were

were called, by the Portuguese, *montes claros*. The river, from Gambia, takes a northern direction; but it sends out a branch to the E. S. E. called Bunch River, in the mouth of which Gambia Island is situated; this branch, however, does not run any great distance, before it divides, and is lost in small creeks.

Gambia was formerly a slave factory occupied by the French, but now deserted; it is an island of considerable extent, situated about seven or eight miles above Free Town. The land is pretty high, but the shore is covered with mangroves and ooze; its situation also in a kind of bay, half surrounded by very high hills, renders it extremely hot, and it has always proved very unhealthy, having on all sides of it woods and swamps. From Gambia, northwards, the river Sierra Leona becomes intersected with a number of islands, most of which are small, and many entirely overgrown with mangroves, and overflowed by the tide; some, however, are of considerable extent, as the island of Robanna, upon which there is a small town of the natives, besides a few straggling houses, built to guard their rice grounds; the land is low, swampy, and very much infested with musquitoes. The islands of Tasso and Masabump, are the next
in

in point of size, and upon the latter are three or four towns belonging to the natives. The soil of Tassò is rich, and the appearance of the whole island extremely picturesque, but the land is low, and the shore is nearly surrounded with impenetrable mangroves; it has besides, several swamps in it of considerable extent, which render it very sickly; at present it is almost uninhabited and uncultivated. To the northward of Tassò is Bance Island, about eighteen miles from Free Town, upon which the Messrs. Andersons, of London, have established a slave factory; this is only a small and barren island, considerably elevated, and of a dry gravelly soil; from its situation, however, it is rendered extremely unhealthy: For being placed as it were in the midst of an archipelago of low marshy islands, the breeze, from whatever quarter they receive it, is impregnated with moisture, and marsh effluvia, from the swamps which it passes over. These causes render the air not only less salubrious, but likewise hotter; and the thermometer generally stands four or five degrees higher there than at Free Town. The inhabitants are supplied with water from a well upon the island, but the water is so bad, that during the rainy season, they

they prefer drinking the river water, taken when the tide is low. In the dry season, the river is salt several miles above Bance Island.

The Bullom shore, so called from a word in the language signifying low land, runs in a S. E. direction from Leopard's Island to its easternmost point, called Tagrin point, from whence it runs almost north. The land, though low when compared to the high land of Sierra Leone, is pretty high when compared with the height of the coast in general, particularly from the river Sherbro' southward as far as Cape Palmas; Cape Mount, and Cape Monferado excepted, both which are high lands. The aspect of the country of Bullom is extremely beautiful; the land being finely shaded by a variety of lofty spreading trees, and, in general, open and free from underwood: the soil is very fertile, free from swamps; and the shore is bordered by a fine sandy beach.

The shore of Sierra Leone, from the Cape to within a mile or two of Gambia, is very rugged, being chiefly composed of rocks which abound in iron, and which lie upon a sandy bottom. Excepting in some of the small creeks, which proceed from the bottoms of one or two of the
bays

bays near the Cape, the shore is quite free from mangroves and ooze.

Free Town is seated upon a piece of ground which rises very abruptly from the water's edge, above which it is elevated at least fifty feet; from thence it rises in a gradual and almost imperceptible manner, till it reaches the foot of the hills which run behind the town, leaving a space of about three quarters of a mile from the bottom of the hills to the water's edge. The hills at this part are supposed to be elevated about six hundred feet above the surface of the water.*

The town is bounded on the N. W. by St. George's Bay, on the E. by another small bay, and on the S. by the chain of hills above-mentioned. The soil is of an argillaceous

* Sierra Leone has always been noted for its fine water, which is supposed to be superior to any upon the coast, and on that account has always been much resorted to by ships. Free Town is well supplied from several small springs which issue from crevices of the rocks. On each side of the town, the water runs in a considerable stream, and discharges itself into the bottom of two small bays, which in the rainy season are so much increased, as to form small cascades. The water when viewed in a glass is perfectly transparent, sparkling, and void of smell or taste.

nature

nature, mixed with sand; and here and there interspersed with rocks; in some parts it is of a very deep red colour. The situation is very dry, incommoded by no swamps in its neighbourhood, and is scarcely troubled with musquitoes. The town extends 2300 feet in front, and nearly the same in depth, though this is increasing; it is laid out in regular streets, of which nine run in a straight line from the shore, and at right angles with it, towards the hills; these are intersected at right angles by four other streets, running parallel to the shore. Each street is 80 feet in breadth, except the street next the water, which is double the breadth of the others. Every house in the street stands separate, 48 feet of ground by 76 being allotted for each family to build upon. The houses are comfortable thatched buildings, consisting of a single story, the walls of which are about 8 or 10 feet high, composed of wattles, unplastered, but commonly lined on the inside with mats, which renders them cool and pleasant, and preserves a free ventilation. The floors are chiefly composed of clay, mixed with lime and sand, and beat very hard upon a bottom of dry gravel or rubbish; which preserves them tolerably dry.

Many

Many of the inhabitants have already built themselves wooden houses, with boarded floors, entirely composed of country wood, which is very well adapted for such purposes; these houses are raised two or three feet from the ground, and as they are becoming more and more common, it is probable, after another rainy season, that this practice will generally prevail. The fire, for culinary purposes, is made, during the dry season, generally without doors, but in the rainy season it is made within on the midst of the floor, the smoke finding a passage through the doors and windows. The small settlement of Granville Town contains about an hundred inhabitants; the town is laid out upon the same plan as that of Free Town, and the houses are built in the same manner: its situation is dry, free from the neighbouring swamps, and is rather more elevated than the scite of Free Town. This place is much infested during the rainy season with musquitoes, and as the inhabitants of Granville Town have scarcely suffered any thing from disease for two years past, it shews that those insects are not, according to Dr. Lind's opinion, to be considered as certain signs of an unhealthy country. Further, it may be remarked, that the settlement

of Port Jackson in New South Wales, which is said to be one of the healthiest climates in the world, is very much infested with these troublesome insects

The inhabitants of Free Town amount to about twelve hundred; in general they are very industrious, without being addicted to spirituous liquors, and live much after the European manner.

Stock of all kinds thrives well in the colony, particularly fowls, ducks, pigs and goats. Among the wild animals met with in the woods, the flintombo, a species of antelope, is most common; the flesh is very good and well tasted: wild hogs are also pretty common, and have been killed; their flesh is excellent, and preferred by many to that of the domestic kind: buffaloes also have been killed, but they are not often met with; and except when they are young, the flesh is tough and not well tasted.

The river abounds with a variety of excellent fish, which form a considerable part of the diet of the inhabitants; oysters are picked from the rocks and from the stems of the mangrove trees in great numbers: Turtle are likewise
very

very common, the hawksbill turtle is the most so, but the green turtle is also frequently met with.

Rice, which is the chief vegetable production of this country, forms a large proportion of the food of the natives and of our settlers; it is almost peculiar to this rice to grow upon dry grounds, and even upon the sides of hills; it is of a reddish colour when cleaned, and is esteemed very wholesome and nutritious. *Jatropha Janipha*, or sweet cassada, is another vegetable which grows here in great abundance; the root, when ground into flour, is often made into thin cakes by the settlers, which are light and palatable; like the sweet cassada of the West Indies,* it is perfectly harmless, and requires no previous preparation, except boiling or roasting, to render it fit to eat, though it is often eaten raw and tastes much like a chestnut: yams succeed very well also, though they were not found here in any quantity till introduced by our settlers. Maize or Indian corn, eddoes, plantains, sweet

* There are two kinds of cassada in the West Indies, one called the bitter, which is noxious, and the other called the sweet, in every respect resembling that found at Sierra Leone.

potatoes, ochre, ground nuts, and various kinds of pulse, are produced here in great abundance.

Among the fruits, pine apples, oranges, limes, papayas, bananas, and a species of yellow plumb, with a grateful subacid taste, are very plentiful. The guayaver and acajou, or cashew, grow here, but are not plentiful; water melons have been introduced and succeed very well; the wild vines, though extremely luxuriant, have an unpleasant acerb taste.

In a former paper* I gave a short account of the weather at Sierra Leone, during the season in which intermittents are most prevalent; I shall now, from a meteorological Journal, which I kept at Sierra Leone during the whole of the year 1793, give a general view of the weather in each month. But before I do this, it may be proper to notice, though in a cursory manner, the most usual course of the seasons. The year, as in other tropical climates, may be divided with propriety into the dry and rainy seasons. The division into healthy and sickly seasons, which

* See Vol. VI. page 2.

holds in many tropical countries, as well as in many parts of Africa, cannot be observed here, as sickness does not appear confined to any particular time of the year. The rainy season may be considered as beginning in May, and terminating about the middle of September. The approach of the rains is usually gradual, being ushered in by tornadoes; they likewise decline gradually, and are carried off by tornadoes. It may be observed that the tornadoes, which precede the rains, are, in general, less regular and also less frequent than those which carry them off.

From November to May may be called the dry season, though showers of rain do sometimes occur during these months independently of what falls in tornadoes. Tornadoes are sudden, and violent squalls of wind, which almost always come from the east; a few instances, however, have occurred of tornadoes from another quarter, but these are very rare. The squall seldom lasts above half an hour, and is generally attended with, or followed by smart rain, accompanied with thunder and lightning: exceptions to this do occur, though rarely; a tornado sometimes not being accompanied with rain, and at other times

with little or no thunder. The approach of a tornado is always indicated by dense black clouds, gathering in the east, which gradually increase until a considerable part of the sky is darkened; at the same time, faint lightnings flash in the horizon, and rumbling thunder is heard at longer or shorter intervals. It is either calm a considerable time before the tornado comes on, or if there be a breeze, as the tornado comes on, it instantly flies round to the E.

According to a vulgar opinion, tornadoes can occur only at high or low water; a little attention, however, would soon have shewn the error of it; they come on at all times of tide, but are most frequent during the night, or early in the morning.

The atmosphere at Sierra Leone is generally so obscured by clouds or haze, or both, that it is very rare to see even part of a day attended with a clear sky; inasmuch so, that it is an observation made by many who have been long upon the coast, though it more particularly applies to the coast to leeward of Cape Palmas, that it is a rare thing to see the sun rise in Africa. This thickness of the atmosphere

atmosphere serves as a veil to temper the scorching rays of the sun. The hottest part of the day is generally about half past two, or three in the afternoon; and the coolest part of the day is between five and six in the morning.

In the following TABLE is presented at one view, the highest, lowest, and medium States of the Thermometer, Hygrometer, and Barometer, during each Month, and during the whole Year. The Number of rainy Days which occurred during each Month, and in the whole Year, is likewise noted, with the Quantity of Rain which fell in each Month, and the Number of Tornadoes. The Rain attending Tornadoes is not included among the Number of rainy Days; but the whole Quantity is noted.

Month	Thermometer			Hygrometer			Barometer			Rain		Tornadoes
	high.	low.	med.	high.	low.	med.	highest	lowest	medium	Days	Quant.	
Jan.	89	74½	81½				30,066	29,810	29,938	1	0,73	1
Feb.	88	75	81½	59½	51½	55½	30,018	29,831	29,924	3	0,30	1
March	95	74	84½	55½	46½	52	29,976	29,888	29,932	2	1,12	4
April	95	74	84½	56½	50	53½	30,016	29,813	29,914	3	1,61	2
May	92	71	81½	61	46½	53½				11	6,90	12
June	88	71	79½	55½	55	60½				25	10,16	2
July	85	73	79	69½	59½	64				30	10,32	1
August	86	72	79	66½	58	62½				29	23,14	0
Sept.	85	71	78	66	58	62	30,068	29,934	30,001	26	19,90	4
Oct.	89	71½	80½	62½	52½	57½	30,090	29,980	30,035	17	9,08	15
Nov.	91½	72½	82	57½	51	54½	30,052	29,852	29,952	4	1,85	9
Dec.	90	72½	81½	57½	46½	52	30,060	29,842	29,951	3	1,17	1
Whole Year.	95	71	83	69½	46½	57½	30,090	29,810	29,950	154	86,28	53

January.—The weather during this month, was in general close and sultry, especially during the evenings and mornings; but this was abated during the middle of the day, by the sea breeze, which commonly blew pretty fresh. The atmosphere was usually much obscured by haze and clouds.

The N. and E. were the most prevailing winds. A tornado occurred on the 3d, and much heavy rain fell on the morning of the 4th. There was much thunder and lightning on the 8th.

The 8th, 11th, 12th, 16th, 28th, 29th, 30th, and 31st days were remarkably foggy.

February.—The temperature of the air, though little different in absolute heat from that of the preceding month, was rendered more agreeable to the feelings, by the fresh breezes which prevailed during the greatest part of this month.

The 1st, 13th, 14th, 21st, 22d, and 28th, were very foggy days. On the 13th, 22d, and 23d, there were slight showers. A smart tornado occurred in the night of the 21st. The most prevailing winds during this month were from the N. and W.

March

March.—Notwithstanding the thermometer for the most part ranged pretty high in this month, the temperature of the air was not unpleasant. The sea and land breezes most commonly blew pretty fresh, and succeeded each other with great regularity. In the mornings, however, during the interval between the blowing of the land and sea breezes, it was often close and sultry, though the breeze seldom set in later than half past eight or nine.

On the 7th a slight shower fell. On the 8th there fell smart rain during the night. On the 13th, 26th, 27th, and 31st, there were tornadoes. There was thunder and lightning on the 7th, 8th, 9th, 10th, 13th, 26th, and 29th.

The 13th, 14th, 20th, 29th, 30th, and 31st days were remarkably foggy: the only entire days in which the heat felt unpleasant, were the 18th and 19th.

April.—Though the range of the thermometer was pretty high this month, the heat was in general temperate and agreeable, the mornings being usually the only part of the day which felt sultry, though this was of short continuance, as the sea breeze generally sprung up about nine A. M. The breeze, towards evening,

evening, sometimes became less, or settled in a calm, which made the air feel close and rather unpleasant. The atmosphere was generally hazy, and frequently obscured with heavy clouds, as if threatening rain.

On the 4th, 20th, and 24th, a slight shower occurred each day. A tornado occurred on the 16th, and 18th, but without being followed by thunder, lightning or rain. A smart tornado occurred on the 23d, with thunder, lightning, and heavy rain. On the 6th, 7th, 8th, 29th, and 30th days, there was thunder and lightning.

May.—This month was more sultry and close than the preceding one, though the thermometer did not rise so high in the present. The most prevailing winds were from the W. and E. but they seldom blew fresh for any length of time. The 7th, 24th, and 29th were attended with heavy rain. On the 9th, 10th, 11th, 19th, 23d, and 25th, slight showers fell. Smart showers occurred on the 16th and 21st.

Tornadoes appeared on the 8th, 12th, 13th, 14th, 15th, 16th, 17th, 19th, 21st, 25th, and 26th. There were two tornadoes on the 13th; the tornado on the 19th was from the sea.

Thunder

Thunder and lightning occurred during some part of the 6th, 7th, 8th, 9th, 18th, 22d, 25th, 28th, 29th and 31st days. The atmosphere was in general very cloudy, hazy and overcast.

June.—The temperature of the air during this month, was in general sultry, feeling often close and stifling, particularly when the sun made its appearance after a shower of rain had fallen, and at the same time there had fallen little wind; though the heat indicated by the thermometer, was not so great as in the preceding months. In the last month, which might be considered as the forerunner of the rainy season, there were only eleven days of rain; in the present month there were twenty-five, of which the 2d, 6th, 10th, 12th, 13th, 14th, 16th, and 17th days were attended with only slight showers. On the 4th, 5th, 7th, 11th, 18th, 19th, 23d, 26th, 27th, 28th, and 29th days there fell smart showers. On the 8th, 15th, 20th, 21st, 24th, and 30th days heavy rain fell. Thunder and lightning occurred during some part of the 1st, 2d, 3d, 6th, 7th, 10th, 11th, 12th, 13th, 14th, 18th, 21st, 24th, 26th, and 27th. A tornado occurred on the 4th, A. M. and on the 7th, P. M.

The

The most prevailing winds were from the S. and W. quarters; the breeze being in general pretty fresh, during the middle of the day, but frequently becoming calm in the mornings and evenings.

July.—During the whole of this month, the atmosphere was thick and hazy, and frequently overcast with dense clouds. The temperature of the air, for the most part, was cool, but often feeling cold with a degree of rawness; during the intervals of the showers, however, when calm, or with only a light breeze, the air sometimes felt sultry and close. The most prevailing winds were from the S. and W. and generally with a pretty fresh breeze; there were thirty days of rain in the present month, the 27th being the only day in which no rain fell. The 1st, 4th, 7th, 8th, 10th, 11th, 12th, 15th, 17th, 18th, 19th, 20th, 24th, 26th, 29th, 30th, and 31st, were attended with smart showers of rain. On the 2d, 13th, 21st, 22d, and 23d, only slight showers fell. On the 3d, 5th, 6th, 9th, 14th, 16th, 25th and 28th, there was heavy rain. On the 3d, 6th, 8th, 10th, and 27th, thunder and lightning occurred.

August.—The temperature of the air during the present month, was, for the most part cool, sometimes

sometimes chilly and raw. The atmosphere was usually obscured by clouds and haze. The S. was the most prevalent wind this month, and in general it blew pretty fresh. The number of rainy days in this month was twenty-nine, of which the 8th, 14th, 22d, 23d, and 31st, were attended with only slight showers. On the 1st, 3d, 9th, 13th, 17th, 20th, and 25th, there were smart showers of rain. The 2d, 4th, 5th, 6th, 7th, 10th, 11th, 12th, 15th, 16th, 18th, 19th, 26th, 27th, 28th, 29th, and 30th, were days in which heavy rain fell. The 21st and 24th were the only days in this month free from rain, and the 21st was the only day which could be said to be pretty clear. There were no tornadoes, nor did any thunder or lightning occur in the present month.

September.—The temperature of the air during the present month, was rather agreeable than remarkable for either heat or chilliness. The atmosphere was frequently obscured with clouds and haze, and the tops of the hills behind the town, were covered with fog. There were twenty-six rainy days in this month, of which the 3d, 4th, 8th, 9th, 11th, 13th, 14th, 16th, 17th, 20th, 26th, and 28th had smart showers. The 1st, 2d, 5th, 6th,
7th,

7th, 10th, 12th, 15th, 21st, 22d, 24th, 25th, 29th, and 30th, were attended with heavy rain. There occurred tornadoes on the 23d, 28th, and 30th. On the 1st, 11th, 12th, 15th, 16th, 20th, 21st, 22d, 26th, 27th, and 28th there was thunder and lightning, during some part of the day.

October.—The rains, which during the three preceding months, had been very severe, began to diminish considerably during the present one. The number of rainy days which occurred were only seventeen, of which the 3d, 4th, 5th, 13th, 14th, 16th, and 28th were attended only with slight showers. On the 18th, 23d, 24th, 30th, and 31st, smart showers of rain fell. On the 2d, 6th, 10th, and 11th heavy rain fell. Tornadoes occurred on the 3d, 4th, 7th, 8th, 9th, 14th, 17th, 18th, 19th, 22d, 23d, 25th, 26th, and 31st. On the 7th there were two tornadoes. On the 2d, 11th, 12th, 13th, 15th, 16th, 20th, 21st, 29th, and 30th, there was thunder and lightning, during some part of the day. The air was, in general, rendered cool and pleasant, by a moderate breeze; but those days on which the land breeze continued till near noon, it was often close and sultry during part of the afternoon, until

until the sea breeze set in, as the interval between the sea and land breezes is commonly greater at those times. The atmosphere was less gloomy than in the preceding months, though still hazy and often obscured by clouds.

November.—The range of the thermometer was higher in the present than in the five last months. The degree of moisture of the atmosphere also, as shewn by the hygrometer, was less than in the same months. The most prevailing winds were from the N. and E. quarters. The heat, during the whole month, was sometimes not unpleasant, though sultry about noon, when the sea breeze set in late. The number of rainy days in this month were only four. On the 1st and 30th slight showers fell. A smart shower fell on the 2d, and on the 25th there was heavy rain. Thunder and lightning occurred on the 1st, 2d, 3d, 4th, 8th, 10th, 20th, 22d, 25th, and 29th. Tornadoes occurred on the 3d, 6th, 7th, 10th, 11th, 12th, 14th, 18th and 19th.

December.—This month, like all the preceding, was accompanied with great haziness of the atmosphere, and often with low heavy clouds. The 23d was remarkably foggy; the
haze

haze covering the Bullom shore, and extending near two thirds over the river. The 8th was very close and sultry; the thermometer, at eight A. M. rising to 85° . There were three rainy days in this month, the 2d, 27th, and 28th. A tornado occurred on the 1st, and faint lightnings were seen on the 26th and 27th.

The temperature of the air was, in general, cool and pleasant. The winds were rather variable this month; the east was most common in the mornings, and often continued till noon, or later. It continued to blow almost the whole of the 19th, 20th, and 21st days. About noon it usually came from the north quarter, and towards evening veered round to west. The breeze was, in general, moderate and pleasant.

Respecting the journal itself, from which these observations are extracted, it is divided into eleven columns; in which are noted, the day and hour, the height of the thermometer and barometer, the state of the hygrometer, the moon's age, the prevailing winds, the appearance of the sun, and the quantity of rain. The relative temperature of the air also, with respect to the feelings, is noticed. The obser-

uations were made regularly four times a day, and as nearly as was convenient, at the same hours. The greatest and least heights, also, of the thermometer, during the day, if differing much from the hour observed, is commonly noted.

The thermometer, constructed according to Fahrenheit's scale, was always exposed to the free air, in a large open passage, perfectly shaded from the rays of the sun. It was suspended about six feet from the ground, and preserved from the contact of surrounding bodies.

The height of the barometer is marked in inches and 1000 parts. This instrument was kept in a large airy room, elevated about sixty feet above the surface of the water; the doors and windows of the room were generally kept open, but the heat of it was sometimes increased by the presence of numbers of people.

The hygrometer made use of was the whale-bone one invented by *Monf. de Luc*, a plate of which instrument, with an accurate description, is given in the *Philosophical Transactions*, vol. lxxxix. page 420. The scale of this delicate instrument is divided into 100 equal parts, 0 being the point of extreme dryness, and 100 that of extreme

extreme moisture. There were two of these instruments alternately used. One being kept close while the other was in use, they were compared from time to time, and after upwards of a year and half's use were not found to vary. This instrument was contained in a box pierced with a number of small holes, and suspended about ten feet from the ground, in a room sixty feet above the surface of the water, and in which the doors and windows were kept constantly open during the day. It was placed out of a current of air, and though the box which contained it was pierced with holes, yet for greater certainty, the lid was kept open about two minutes before each observation.

The rain gage was placed in an open piece of ground, at a considerable distance from trees, houses, &c. upon a stand about four feet high. The quantity of rain which fell between any two observations was in general noted, except when the shower was very slight, when it was left until more had fallen.*

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* The figures in the column for the quantity, of rain denote that the quantity of rain fallen is equal to so many of the divisions of the scale of the rain gage in depth. The
division

The instruments made use of were all made by Mr. Adams, of Fleet Street, London; except the barometer, which was made by Mr. Ramsden.

On a general view of the most prevailing diseases at Sierra Leone, it appears, that remittent and intermittent fevers constitute the bulk of the complaints; and that the rest are chiefly disorders arising from a morbid increase of irritability of the constitution, or of particular parts; which, from a slight resemblance, have been usually termed febrile, though they neither arise from contagion, nor from other miasmata. The latter I shall therefore denominate diseases of erethism, in contradistinction to the truly febrile. Fevers occur indiscriminately at all times of the year, especially in persons not accustomed to the climate: They are, however, most frequent during the rainy season, and for a month or two afterwards.

division of the scale was into parts rather less than an inch; but, which, if divided by 14, gives very exactly the perpendicular height of rain upon the earth's surface.

Their

Their phenomena are nearly the same at all times; except in the remissions being more or less perfect; and that catarrhal symptoms are occasionally superadded to them.

January.— Intermittent fevers were the most prevalent diseases during this month; a few quotidians occurred; but the tertian type was most generally observed, and there was not an instance of a quartan. These diseases were, for the most part, mild, and readily yielded to a proper exhibition of bark. Convalescents from fevers of the preceding months, continued to recover their strength, though slowly, and were still liable to relapses from errors of diet, or from the least fatigue; and in many instances, from simple exposure to a hot sun. Very few remittent fevers appeared in this month, and those were of the mildest form. Many of the convalescents, and those who were much debilitated, though they had not been lately sick, were liable to frequent attacks of what they termed night fevers. As this is chiefly characterized by increased irritability, it may be properly ranked as one of the diseases of erethism. The patient, though weak and uncomfortable, seldom complains much during the day, but towards evening

becomes uneasy and restless; the skin feels dry, and is rather hotter than usual, but does not impart that burning heat usually felt in the hot stage of an intermittent: the principal complaint is of internal heat, or, as is usually termed, inward fever. The pulse is quick, and rather more frequent than natural, though sometimes it is not affected while the patient is at rest. The head is affected with pain, either on the crown or back part. The patient seldom complains of much thirst, but rather of a clamminess of the mouth. Slight chills running down the back, sometimes usher in a paroxysm; but these are rare, and are never of any long continuance when they do occur. The other symptoms continue the whole night, gradually becoming milder towards morning, when a partial sweat sometimes breaks out upon the head and breast. In the morning, nothing is felt but a considerable degree of languor and debility. These symptoms harass the patient often for weeks and months, without appearing much to increase the debility. They sometimes suddenly disappear for a few days, a week, or a month, and return again. An emetic is of use when the stomach is much loaded; but in general,
a course

a course of tonics is sufficient. Many complained of pains in the bowels, chiefly from errors in diet, attended with slight diarrhœa, and sometimes with vomiting. Slight pains shooting through the breast, increased upon inspiration, were complained of by some. Blisters were seldom employed, as the symptoms generally yielded to opiates, and gentle sudorifics. Ulcers, which had been very frequent for three months past, were still numerous ; they were, in general, extensive and foul, with a copious thin discharge: most of them had supervened to fevers, or arisen from musquitoe bites, or other trifling causes, in habits rendered extremely irritable. A liberal use of bark was generally necessary, and the Hydrarg. nitr. rub. applied to the sores in such proportion as to keep up a proper degree of stimulus, was one of the best dressings.

February.—Though intermittents formed the bulk of the diseases of this month, they were not only less frequent than in the last, but were in general slight, being often brought on by irregularities, and disappearing of themselves in a few days. Those of a more obstinate nature chiefly occurred in persons who had suffered a frequent recurrence of the disease, and

neglected the proper remedies. Diseases of erethism still continued: tumefaction of the abdomen, with obscure fluctuation in some instances, was very common, especially among children, attended with slight erethismatic affections, resembling the train of symptoms which takes place in what is called worm fever. The irritability in these cases was such, that mercury speedily affected the mouth, when given in the smallest doses; neither was its use attended with any sensible good effect. A salivation, which continued a week, was produced in two children, by Calom. gr. iij, given in doses of gr. i. Saline Purgatives, with the Decoct. Cort. Peruv. vel Angustur. were most effectual in promoting a cure. Œdematous swellings of the lower extremities were the usual consequences of long continued intermittents; but, though in many instances, attended with evident enlargement of the spleen, they yielded to gentle purgatives, and a course of corroborant remedies, used alternately. Two cases of epilepsy occurred this month, both in females; in one of these, a girl of sixteen, who had a slight show of the menses, the return of the fits was stopped by the *Cupr. Ammon.* In the other, a woman who had borne children,

children, the fits recurred every evening with as much regularity as the paroxysm of an intermittent. The *Cupr. Ammon.* with her was tried ineffectually. The mineral solution (of Arsenic) was then exhibited for ten days, in doses of ten drops three times a day, which put a stop to the fits for near three weeks, though she often felt some uneasiness at the usual period of their attack. After this time, the fits returned, though not more frequently than two or three times a week, and at uncertain times of the day. As she was now in an early state of pregnancy, and had experienced the same complaints in former pregnancies, no more medicines were exhibited; and after the fourth month the fits entirely disappeared. An eclipse of the moon happened on the 25th of this month, and the same night five persons were affected with agues; this circumstance, however, is by no means to be referred to any lunar influence, as it was an occurrence which frequently happened, and as upwards of ten times that number of convalescents from fevers, who were still in a weak state of health, did not feel the least ill effects from it.

March.—In the present month, which was very healthy, scarcely any disease could be said

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to be more prevalent than another. Convalescents recovered their strength and health very rapidly, and were not so subject to relapses, as in the two preceding months. Intermittents had now become rare, and were almost all of a very mild kind. Several children were, in the course of this month, affected with vomiting, and sometimes with purging. The abdomen was painful when pressed by the hand, the pulse was generally quick, the skin hot and dry, especially over the forehead, and the eyes were bright. As vomiting relieved the symptoms, it was encouraged by a few grains of Ipecacuanha; and the bowels, if costive, were unloaded by a dose of Calomel. A few drops of *Tinct. Opii. and Spt. Nitr.* generally brought out a gentle perspiration, and carried off the complaint. A few cases of dysentery appeared this month, attended with severe tormina and tenesmus; the stools were bloody; the pulse was, in general, quick and small. There was great general debility and evening exacerbations. Excepting one instance, where a man and his wife were affected with this disease at the same time, there was not an example of two in a family being seized with it. A man, aged forty-five, rather corpulent, and much addicted

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to drinking of spirits, after having, for two or three days, experienced great head-ach, giddiness, heat and redness of the eyes, with sparks of light flying before them, was seized with hæmorrhage from the nose, and lost about two pounds of blood, which relieved the symptoms of congestion in the head. A woman, about fifty, who had for several months laboured under phthical complaints, with effusion into the cavity of the thorax, died this month.

April.—Diseases from erethism were very frequent during the present month; as they generally arose in consequence of fatigue in a hot sun, and in persons of a weakly frame of body, they were speedily removed by an infusion of some bitter, assisted by a few days rest. Many complained of head-ach, which appeared to depend upon an affection of the stomach, and was relieved by emetics. Colic pains, attended with slight diarrhœas, were also frequent; for the most part, they were produced by acrid ingesta lodging in the primæ viæ, and required the use of evacuants. Convulsions, from dentition, occurred in several children this month, and in one instance, proved fatal. Purges of calomel, opiates, and

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in particular the warm bath, were attended with the most beneficial effects. A case of fever, which made its appearance in a very insidious manner, and was accompanied in its course with bilious vomiting, spasms and great debility, ended fatally on the fifth day. Two cases of epistaxis occurred; the one, in a person who had marked symptoms of phthisis; the other, arising merely from temporary congestion.

May.—The complaints of this month were few in number, and slight, and may be considered, rather as the sequelæ of diseases of former months. Four cases of anasarca, succeeding long continued intermittents, were cured by a course of mercury and squill, together with the use of corroborant remedies. It may be observed, that these patients bore the use of mercury well, a salivation not being speedily produced. In one instance, the *Infus. Nicotian.* acted as a very powerful diuretic; but though given in small doses, it was discontinued, on account of the vertigo and temporary loss of vision which it produced. A few slight cases of ophthalmia occurred, which were presently removed by cold saturnine lotions. Some cases of dysentery appeared this month,
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in general slight; but in some, attended with symptoms of great weakness and irritability.

Several persons complained of severe head ach, with much throbbing and pulsation of the temples, occasioned by long exposure to a hot sun. The sense of fulness of the head soon disappeared after rest, in the shade, leaving behind a head-ach, which yielded to gentle purgatives. In no instance did it resemble a *coup de soleil*, a disease, which has not occurred here once in the space of two years; but the symptoms came on gradually, in proportion to the exposure.

Two cases of marasmus, in women who had been delivered of children during the last month, terminated fatally in the present one. A case of apoplexy terminated fatally on the fourth day, in a woman aged sixty, of a very corpulent habit.

June.—Intermittents, which began to make their appearance towards the conclusion of last month, became prevalent during the course of the present one. Several cases of the remittent fever likewise occurred; the symptoms were in general mild; and, in many instances, the exhibition of an emetic produced complete intermissions. Catarrhal complaints were very
rife,

rife, and frequently appeared as symptoms of fever. In one case of fever, the catarrhal symptoms were severe, and appeared to constitute the primary disease; the debility, however, which occurred on the 2d day, together with very slight evening exacerbations, and a slight, but fixed pain remaining over the eyes, rendering the case suspicious, the bark was liberally exhibited; and the patient recovered, though he continued weak for some time. Slight coughs, and soreness of throat were frequent. The cynanche parotidea occurred in a few children; the swelling of the face was considerable and painful; there was great restlessness, increased heat of body, quick pulse and some thirst. The tumefaction of the face disappeared gradually, without being followed by swelling of the testicles or breasts: laxative medicines, and gentle sudorifics, were employed with advantage. Rheumatic pains became rather frequent towards the conclusion of the month, particularly in the hips and loins. Three children were seized with severe vomiting, purging, and frequent convulsive twitches in the face and limbs, owing to their having eaten, as was said, a quantity of raw cassada; it is, however, probable they had taken some other

other root by mistake, as no such instance of its bad effects had been observed before, although it constitutes a considerable part of the diet of the inhabitants: one of the children died notwithstanding the exhibition of an emetic, with plentiful dilution, the use of demulcent anadoyne medicines, and of the warm bath; the other two recovered by this mode of treatment.

July.—Remittent fevers became more and more prevalent during the course of this month. The onset of the disease, was, in general, sudden and very severe, few patients drooping, for any length of time, before they were confined to bed. There was great heat, nausea, and considerable debility; the remissions were also less evident than in the foregoing month; and the distressing symptoms, as head-ach, restlessness, and oppression of spirits, were more obstinate. Rheumatic pains became less frequent during this month. Several cases of colic occurred, which were, in general, slight. Many persons employed in the woods in cutting timber, &c. especially such as went early in the morning, were affected with bilious vomiting, sometimes attended with purging; but these symptoms soon disappeared

disappeared, after the use of gentle evacuants and opiates. Dysenteries were frequent this month, but did not appear to spread by contagion; the griping and tenesmus were severe, the stools frequent, small, and chiefly composed of blood and mucus; great debility soon occurred, and all the symptoms were aggravated towards evening. After evacuating the bowels, by saline purgatives, calomel, with opium, was of great use in removing the gripes and tenesmus. The disease proved fatal in one case only, the patient being seized with it, after he had suffered greatly from fever, and had his strength much wasted.

A middle aged man, corpulent, and much addicted to drinking, was affected with singultus, without any other complaint preceding or attending it. The spasms were frequent, but not attended with pain, except a slight soreness in the region of the stomach; the hiccup was so loud as to be heard near fifty yards from the house he lived in. The pulse, during the continuance of the spasm, was raised to an hundred strokes in a minute, and was full and soft. Musk, camphor, and ol. succini, were employed, and a large blister applied in the direction of the diaphragm, without effect.

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It yielded at length, after a continuance of four days, to large doses of laudanum, given at every return of the complaint.

A woman, pretty far advanced in pregnancy, died suddenly; she complained, a few hours before death, of a pain in her heart, (as she expressed it,) but which was not so severe as to draw the attention of the family, and as she lived at a distance in the country, no application could be made for assistance.

August.—Remittents continued to be the prevailing diseases of the month. In the early part, the disease appeared to become less frequent, and the symptoms were more mild; but the frequency of it increased again towards the conclusion. The evening exacerbations were very severe, and were followed by extreme debility. In addition to these complaints, several were affected with slight catarrhs, and few escaped more or less of coryza; the skin became hot and dry towards evening, with a degree of listlessness and inactivity. These symptoms seldom lasted more than a few days, and required only mild *sudorifics* and *opiates*. A few patients complained this month of cephalalgia: the head-ach generally increased in severity towards evening,

and was particularly felt across the forehead, and on the side of the head; the eyes were often red, flushed, and unable to bear the light. The skin was hot and dry, and the tongue white and parched. Emetics appeared to be of use; but, in general, small doses of camphor, with opium, were most effectual in relieving the severity of the pain, and in bringing the paroxysm to a termination by profuse perspiration; the return of the complaint was effectually put a stop to by exhibiting the bark. Blisters seldom afforded effectual or even temporary relief. A case of cholera morbus occurred this month, which terminated favourably.

A child, about ten years of age, died of fever, on the seventeenth day of the disease; her indisposition, at first, was so trifling as not to be particularly noticed for some days; though of the remittent species it very much resembled the typhus of cold countries; the eyes had the same glassy appearance, the tongue and teeth were covered with a thick black fur, and subfultus tendinum occurred; which symptoms rarely appear in the fevers of this country, except the disease has been long protracted, and ap-
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proaches to a fatal termination. In this case, bark and cordials were employed.

September.—This month was more unhealthy than any of the preceding, and was felt by those living on board the vessels at a distance from the shore, as much, or rather more than by those on the land. Among the black people, (who indeed, are at all times much less severely affected with the fever than the whites,) the degree of sickness, during the present month, was comparatively trifling, and chiefly consisted in intermittents of the tertian type. The whites who lived on shore, upwards of twenty in number, suffered much from sickness, scarcely one of them escaping a severe attack of fever; many also had relapses. The symptoms of the fever were very distressing; in particular the anxiety and restlessness, which continued a long time after the fever had ceased. An intermission scarcely ever occurred from the first attack; the remissions were obscure, and only perceptible soon after the commencement of the disease. An emetic was generally exhibited immediately on the commencement of the complaint; and as soon as the stomach could bear it, the bark, with opium occasionally, was exhibited in large doses.—

Three patients died this month of the fever, on the 9th and 10th days of the disease. Instances occurred of severe vomiting; gripes, and purging, from eating cassada which had stood in a brass vessel, in a woman, and a child about seven years old. The woman was immediately affected with severe vomiting and purging, which, though distressing for a time, carried off the irritating cause; the child having vomited only once or twice, was more severely affected. The pulse was small and quick, the extremities were cold, the eyes much distorted; and the patient appeared to be in much pain. By means of an emetic, which operated both upwards and downwards, these symptoms disappeared, except slight convulsive twitches of the face and limbs, and starting during sleep, which continued for a day or two, and then went off. Two cases of cholera morbus appeared; in one man it was attended with very severe spasms of the legs, and seemed to have originated from exposure to a current of cold air when he was much heated by having worked in a hot sun. In the other case, the vomiting was chiefly severe, and happened after working all day in the woods, and spending the night there. Both the

The patients recoverd by small doses of opium, fomentations, &c. A case of gastrodynia which occurred was cured by opium and the spir. æther. nitr.

October.—From the commencement of the present month the remittent fever gradually became less frequent, and towards the conclusion, intermittents were very general. Cases of ophthalmia were also frequent: they appeared to arise from cold, and were always attended with considerable effusion of tears, and inability to bear the light. In one instance the pain was so severe as to require large doses of opium to moderate it, and a strict use of the antiphlogistic regimen, except bleeding. Cold saturnine lotions with opium, applied externaliy, were very useful in abating pain, and relieved the turgid state of the vessels. Towards the end of the month, pains of the bowels, resembling colic pains, became frequent; and in several instances the constipation was so obstinate, as to require repeated doses of calomel, ol. ricini, and sal. cathart. Fomentations to the abdomen afforded speedy but only temporary relief.

A woman, after having been employed all day in washing while exposed to a hot sun, was

seized, late in the night, with very severe vomiting and purging, acute fixed pain in the bowels, and frequent cramps of her legs; by the use of mild diluents, fomentations to the abdomen, and small doses of tinct. opii, given at short intervals, the symptoms abated; but they returned the next night about the same time, with equal violence. The same plan of treatment was pursued with advantage, and a few doses of bark were given; after which there was no return of the symptoms.

November.—The complaint of the bowels, which made its appearance towards the end of last month, became so frequent during the present one as to resemble an epidemic. The natives, in different parts of the river, did not escape it, and so frequent was it among them, that according to their custom, they attributed it to the effects of witchcraft. The pain was, in general, confined to the left side, between the umbilicus and spinous process of the ilium; but shooting pains were sometimes felt in the epigastrium, with a sense of tightness: the abdomen, when pressed, was usually fore. The pain was not constant, but generally abated for a few minutes, and returned with greater violence. Sometimes there was a
suspension

suspension of pain for a few hours, but an exacerbation constantly happened about evening. The pulse was always soft, and, except during the severity of the pain, when it increased in quickness, was not much affected. The tongue was white and furred, and much thirst attended. In many instances, where the pain was on one side, a considerable degree of pulsation could be felt from the mesenteric arteries. The constipation was as obstinate, and the other symptoms were more severe, in this than the last month. Sudorifics and warm cordial medicines produced no good effect. Large doses of opium afforded only temporary suspension of the pain. The frequent application of fomentations to the abdomen, not only mitigated the pain, but often procured a little sleep. The most certain relief was produced by an injection of turpentine. In one case, where the patient had been ill three days, after a drachm of camphor, and two drachms of tinct. opii. had been taken during the night, with little more effect than that of rendering the pain more obtuse; an enema of turpentine was followed by immediate ease, and produced several stools, which large doses of ol. ricini had failed in procuring. In another instance, where the patient had for

four days scarcely obtained any relief from pain, though every means had been used except injections, calomel, united with opium, was given in small doses, night and morning. A salivation was produced after eight grains of calomel had been taken, which continued copious for ten days, and then gradually ceased. The patient felt no remains of pain from the time his mouth was affected, and soon after the salivation abated, recovered his health and strength. A few cases of intermittents occurred this month, which were in general slight.

A young man, without having any previous indisposition, was, while sitting in a chair, seized with profuse hæmorrhage from the nose, by which near two pounds of blood were lost, and fainting at length put a stop to the hæmorrhage; the debility induced was very great, but was removed by bark joined with acids. A case of remittent fever terminated fatally this month, on the fourth day of the disease, being towards its conclusion attended with severe vomiting, and spasms all over the body.

December.—This month was extremely healthy, more so than any of the preceding. A single case of remittent fever occurred this month,

month, in a woman, who had been delivered about ten days, after an easy labour. It was not accompanied by any affection of the bowels, but terminated fatally on the sixth day after the attack, owing in great measure to her obstinacy, in refusing medicines till it was too late. Except the case of fever, and one of peripneumony in a woman, nearly at the term of parturition, no acute disease of any consequence occurred in the present month. The peripneumony began in the former month, but was not regarded by the patient until attended with considerable dyspnœa, hectic flushings, and night sweats; the pain was very acute under the left breast, and there was a considerable expectoration of a puriform matter, which had been preceded by frequent slight chills; the pulse was small, but hard and quick; a blister had been applied to the pained part, but without effect. An opiate was exhibited every night, and an emetic composed of antim. tart. and vitriol. cupr. \overline{aa} gr. ii. was given every second morning, and during the intermediate days, the pilula scillæ *Pharmac. Lond.* was used. By the use of these remedies the symptoms gradually abated, and at the end of this month no other complaint remained but a slight degree of hoarseness. Early
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in January she was delivered of a healthy but small child, at the full period, which she has suckled for two months past without inconvenience.

A person, who had long laboured under asthmatic complaints in America, but during a residence of near two years in Sierra Leone had never experienced any severe attack, had, during the present month, three several attacks of dyspnoea approaching to orthopnoea, but which was each time speedily relieved by full vomiting. There occurred two cases of a periodic nervous head-ach, attended with great irritability, which were cured by a course of tonic remedies.

I have thus given a concise view of the diseases that prevailed at Sierra Leone, in the course of one year ; and I shall conclude it with observing that while other countries have been gradually improving in cultivation, and thereby changing even the nature of the climate from unhealthy to healthy ; Africa, depressed by the trade in its inhabitants, remains in the same rude, uncultivated state, in which it was centuries ago. It has proved the grave of many Europeans, but, a great or perhaps,
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the chief part of this mortality may be attributed to causes independent of the general insalubrity of climate. Of the Europeans who have died in Africa, the greater part are either seamen or traders. The former, are in every country remarkable for imprudence and carelessness of their health; and it has been observed, even in temperate climates, that they are generally short lived. But in Africa they labour under disadvantages unknown elsewhere, and which, of themselves might fully account for the extraordinary mortality. On board of Guinea ships, there is often no regular allowance of liquor, and as the seamen employed in the African trade, are commonly dissolute, they eagerly seize every opportunity, while laying on the coast, of procuring spirits, even selling their wearing apparel and their beds, if, as generally happens, the captain refuses them any other means of purchasing them. In this way, few are possessed of clothes to shift themselves, when drenched with the heavy rains which fall in the wet season, or of any other bed than the bare deck, or a cable, whereon to sleep at night. During the day, they are often exposed to row in boats, under a scorching sun, and when fatigued

figured with this laborious employment, frequently fall asleep in the boat, exposed to its ardent rays; this extreme of heat is commonly followed by exposure to the heavy chilling dews, which begin to fall after sun-set, and which affect their bodies the more readily, as they have been heated by the labours of the day; this is a very frequent cause of the obstinate rheumatic pains with which many in these situations are affected.

These causes of disease, it may be said, the African has in common with the West Indian trade; this must be partly granted, but the following evils are peculiar to the former. The station of vessels trading to the coast is often such, that it may be considered as the focus of disease. Vessels frequently remain for many months on the coast, perhaps in rivers, near an oozy shore, covered with lofty mangroves, which exclude the cool sea breeze, permitting them only to receive, during the night and part of the morning, a pestiferous breeze from the land, impregnated with moisture, and the exhalations of marshes. During their stay here, the men are perhaps sent up creeks in open boats, in which they continue for several successive days, exposed to all the vicissitudes

of heat and cold. The unbounded licence of a slave ship; exposes the men likewise to all those evils which arise from excess of venery; while the influence of this trade on the minds of their superior officers, often exposes them to the still more fatal effects of scanty diet, and of furious and ungovernable passions.

The conduct of those Europeans who form little factories upon the coast for trade, is seldom much better than that of the unthinking sailor; the most part of these traders have been originally common sailors, who from long residence upon the coast, have become acquainted with the trade. Their mode of life is generally extravagant, and licentious; they adopt readily all the customs of the natives, so that it has become a proverb among them, "that a white man soon turns black." The miserable houses, or rather hovels, they inhabit, often built of mud, without any flooring but the damp earth, and much inferior to those of the natives, show how little they avail themselves of European arts.

Their places of residence are chosen without any regard to health, but according as they may be advantageously situated for trade; for which reason, they are generally on the banks
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of some river, or up some small winding creek. The towns of the natives are usually furrounded by trees, &c. shut up from receiving the cooling breeze; a situation preferred by them, on account of the security it gives from sudden attacks, although its baneful effects are felt by themselves, and proved, by the sickness, which every rainy season prevails among them, and by the feeble emaciated bodies of their old men. That health may be retained in Africa, as well as in other parts of the world, when attention is paid to situation, &c. appears proved by the instance of Free Town. The scite of this town is such as to avoid the inconveniencies above mentioned, and the salutary consequences of this, have shewn themselves by the very trifling degree in which the ill effects of the last rainy season have been felt by the inhabitants.

