

“The nature of the vegetation is here, as well as every where else, the truest criterion of the climate. Few of the undoubtedly indigenous plants can be called tropical; on the contrary, the flora of the island is poor in some families which occupy a large portion of tropical vegetation in general; such, for instance, as the *Composita*, while it is much richer in others chiefly found in temperate climates, as the *Labiatae*. Few of the plants of the hotter regions of Africa are found here; but a much greater number of species similar, or allied to, those of the temperate extremities of this continent, and of the Canary islands in particular. The number of these encrease in ascending from the low grounds to the hills of second magnitude, where they are succeeded partly by European and partly by other Canarian plants to the height of 3000 feet, which was the greatest elevation I reached.”

“St. Jago, though enjoying the genial influence of a tropical sun, seems to be poor in indigenous plants, as is indeed usually the case with islands at any considerable distance from a continent. But though nature is not here spontaneously productive, she has adopted every plant, which has been brought to the island either by accident or design. Thus the most prevalent species are exotic, and chiefly introduced from the other Portuguese colonies, particularly from the Brazils and the Malabar coast. The

Jatropha curcas, probably first brought here for its seeds, which afford a good oil, forms thickets in the vallies and on the sides of the hills; the *Anona tripetala* is also common in the same wild state, and in similar situations. The *Justicia malabarica* covers all the fields and bottoms of the vallies. The *Argemone mexicana* is dispersed in every direction; and the *Cassia occidentalis* is scattered amongst the rocks round Porto Praya. Three species of *Sida*, the *canariensis* being most abundant (and even more so than in the Canaries) and one species of *Malva*, also very prevalent, are probably from America.

“ The principal indigenous plants in the lower region, are a species of *Mimosa*, which I have named *glandulosa*; a *Convolvulus*, which is doubtful, and may also be American; a *Zizyphus* resembling the *vulgaris*. *Spermacoce verticillata*, said to be common in the West Indies and Africa: *Momordica senegalensis*, and *Cardiospermum hirsutum*, both of Senegal, and *Lotus jacobæus*. In the hilly region some indigenous plants cover large tracts, resembling, by this character of aggregation in one place, the vegetation of temperate climates. A new species of *Pennisetum* covers all the hills, having no other resemblance to tropical grasses, than its height and ramified stems. Among the many Canarian plants, I looked long for the family of *Euphorbia*, so preva-

lent in the Canaries; but at the height of about 1600 feet I at length found the sides of the hills and small vallies covered with large bushes of a *Thymalea*, resembling the *pisca-toria*, but the identity difficult to be established. A *Sider-oxyton*, I was told, formed thickets on the highest mountains, but I saw only one sterile plant resembling the *Marmulana* of Madeira.

“I have, in the following table,* divided the vegetation of St. Jago into two regions only, and doubt if the plants of the Pico de San Antonio differ sufficiently to form a third. I must however observe, that a two days excursion, in the dry season, and in one of the least fertile parts of *one* island only, is by no means sufficient to establish a physical arrangement of the flora of the islands in general, where such difference of localities exist as in the burning peak of Fogo, and the wooded mountains of the island of San Antonio. Indeed, from the little I had time to observe, I am convinced that a botanist would have his labour well repaid should he give a sufficient time to the examination of the vegetable reign of these islands; nor can I help being surprised that no one has yet turned his attention towards them.”

With respect to the cultivated vegetables, Dr. Smith observes, “Cultivation is only seen in the glens or ravines,

* Inserted in Professor's Smith's Journal.

which are watered by rills from the mountains. In the upper and wider part of the valley of Trinidad, we first met with plantations of Indian corn, cassava, sugar cane, *Arum esculentum*, and pine apples. Cotton and indigo had also been formerly planted in some spots of the valley, but being neglected, a few plants run wild are now only to be seen. On the sides of the brooks grow luxuriantly the fig, lemon, orange, papaw, (*Anona triloba*,) custard apple, (*Anona africana*,) the tamarind, guava, plaintain, and banana, (*Cassia fistula*,) and prickly pear (*Cactus opuntia*). Near one of country houses we saw some *Ailanthus glandulosa* *Ximenia americana*, and a few grape vines. Besides the date palm, which grows in abundance in the sands near Porto Praya, some tall cocoa palms are scattered here and there, and bear ripe fruit at the elevation of 800 feet above the sea. A single palmyra (*Borassus flabelliformis*) was seen.

On some spots of the elevated grassy hills, roots and vegetables are cultivated with great success; we saw no traces of other *Cerealia* than Indian corn, but were told that wheat succeeds perfectly when sown in the dry plains in the rainy season, as does rice in the lowest and wettest grounds; but the islands being supplied with corn from America, in return for their salt and mules, the indolent inhabitants do not think of cultivating either. The inhabitants we con-

versed with were entirely ignorant of any tree affording dragon's blood, though the *Dracæna draco* is said to be found in these islands, as well as Madeira and the Canaries.

The deep valley of St. Domingo, on the east side of the island, which we saw beneath us from the mountains, and that of Ribeira on the south-west side, we were assured are better watered, more fertile, and more extensively cultivated than that of 'Trinidad.'

Dr. Smith remarks of the geological features of the island, that "the Cape Verdes, like all the African Atlantic islands, are of sub-marine volcanic origin, and mostly of the basaltic formation. Few of them seem to have had super-marine eruptions, and perhaps the cone of Fogo, which rises above 7000 feet, and still smokes, is the only one. The forms of the four high north-western islands, and of Brava, as represented in the charts, lead to the belief that they do not differ essentially in structure from the basaltic mountains of St. Jago, and it is probable that Mayo is similar to the inferior region of the latter island.

"The south-east and south coasts of St. Jago are surrounded by steep and often perpendicular rocky cliffs of a few fathoms in height, from which the land rises towards the mountains, in a generally flat surface, with a few hills covered by loose fragments and furrowed with ravines.

“ The valley of Trinidad, the largest and deepest ravine in the south side of the island, commences at the sandy beach of Porto Praya, and runs S. S.W. and N.N.E., with its upper extremity bent to the E.N.E. until it is lost in sloping hills. It is generally covered with volcanic fragments.

“ The central ridge of hills follows nearly the largest diameter of the island from S.E. to N.W., but nearest to the eastern coast, with sloping sides to the west, and having many steep basaltic rocks, and well watered vallies or ravines to the east. The peak of St. Antonio rises above the other mountains in an oblique, conical, sharp-pointed form, to the height of about 4500 feet.

“ The sea rocks round Porto Praya expose five strata to view ; 1st, or lowest, a *conglomerat*, passing into pumice tufa ; 2d, *pumice* ; 3d, a thin layer of *porous basalt* ; 4th, *columnar basalt* ; and 5th, or uppermost, a *basalt-like substance*, which from its concentrical and globular forms, seems to have been in a semifluid state. Farther inland, the basaltic strata sometimes contain *olivin* and *augite*, and more rarely *amphibole*. About a league up the valley, on its western border, are huge rocks, which cause a bending in its direction, and which are composed of a deep red *quartz*, with crystals of *felspar* ; about two leagues up are found

loose masses of lava, the cells sometimes empty, sometimes filled with crystals of *mesotype*. To the west, I observed at some distance a discoloured appearance, not unlike a lava stream, and not far distant from some conical hills, in the direction of the Peak of Fogo; but the stinted time did not admit of examining if these were the vestiges of an eruption. In two or three places I met beds of a compact *felspar*, mostly decomposed into a white earth. I was also told of a bed of shells among some hills, not far distant from the place named *Toara*, but which the same reason prevented me from verifying."

The island appears to be scantily supplied with birds, either as to species or numbers; those seen were three species of *falco*; the first a fishing eagle, common at Porto Praya; the second ash-coloured, of a large size, seen only on shore; and the third, which was shot on shore, nearly resembled the sparrow-hawk. The small birds, of which specimens were shot, were a fine king fisher (*Alcedo*), very common; the common swift (*Hirunda apus*;) a sparrow differing little from the European house sparrow; a bird resembling the lark; and a very small warbler, the only one that appeared to have any song. Some covies of Guinea fowl were seen, but too shy to be shot at; and the common quail was also seen. The greater tropic bird,

(*Phaeton etherus*) breeds in the crevices of the elevated rocks near the shores, but was not at this time numerous.

Fish are tolerably abundant in the bay, and the seine may be hauled with good success, either in a sandy cove on the west side of the east point of the bay, or on the beach west of the town; the latter appearing preferable, the former being subject to a sudden rise of surf, when the sea breeze blows fresh. Of nine species of fish which we took, three only were familiar to us, viz. a young white shark, (*Squalus carcharias*) barracoota, or barracuda and grey mullet. The others we were prevented from examining by a mistake of the cabin steward, who (supposing they were selected and put by for the purpose) caused these specimens to be drest for dinner. Although the most rigid catholics, the inhabitants seem to make fish a very small portion of their general food, a single boat alone going out to fish in deep water; and the few fish we observed on shore were taken as we understood by hook and line from the rocks. The Governor, however, on learning that we had hauled the seine with success, let us know that it was customary to pay him the compliment of a dish of fish, which through ignorance we had omitted. Of crustaceous fish, we only took a prawn four inches long, a few small crabs among the rocks, and a species of land crab. The testaceous mollusca

collected among the rocks were not numerous, consisting of *patella*, *buccina*, *turbo*, *trochii*, and dead shells of cones. Two species of sea egg (*echinus*) were also found on the rocks.

The insects seen (besides the common fly of a small size, and neither numerous nor troublesome,) were several kinds of grasshoppers (*grylli*), three or four species of *coleopterous* insects, among which was a small beetle (*Scarabæus*), and some moths and butterflies. The only reptile seen was the common stone lizard.

Porto Praya has been so often visited by our navigators, that it may be supposed they have left little room for new nautical observations ; the directions for knowing the bay are indeed so minute and various, as to confuse rather than assist a stranger ; it seems however to have been forgotten, that one marked and prominent feature is a better guide than a number of trivial appearances, which may change with the position of the observer.

It seems to me to be quite sufficient to inform the navigator, that the S.E. point of the island is seen as a very long and very low point in coming from the north or south ; that to the west of this point, three or four miles, is a bay with a brown sandy beach, a building, and a grove of date (not cocoa-nut)* trees ; that this first bay must not be mis-

* This mistake is made in all the directions for Porto Praya that I have seen ; the trees are however sufficiently different in appearance, to render the correction proper.

taken for that of Porto Praya, as its east point is surrounded by rocks that do not *always* break ; that after passing this bay you may keep along shore towards Porto Praya within $1\frac{1}{2}$ mile, or in 10 fathoms. This last bay is first distinguished by a battery of earth or brown stones on its west point, off which the sea *always* breaks to some distance. In standing on, round the east point of the bay, (which is safe, and should be rounded in seven or eight fathoms, or within a cable's length,) the brown sandy beach opens, on which is first seen a house or shed, then a grove of date (not coconut) trees, and shortly after the fort itself.

With respect to anchorage, it may be proper to observe that a large ship should lay well out, and near the east shore, in order to ensure her weathering the west point of the bay, should the wind be light, or far to the east, as is often the case. The best birth I conceive to be with the flag-staff of the fort N.W. by W., the east point of the bay E.S.E. and the S.W. point W.S.W. in seven or eight fathoms. The ground is coarse sand and gravel, that does not hold well, consequently it requires a good scope of cable to bring the ship up in a fresh sea breeze. It is also advisable to drop a kedge anchor to the west to steady the ship, and keep the bower anchor clear, when at times in the forenoon the wind is light from the west.

There is always some surf on the beach, so that it is

proper to have grapnels in the boats going on shore. When the surf is high, there is a good landing place at a rock east of the town, where a path-way is seen. It is also very necessary to be cautious in carrying sail in boats, the puffs of wind from the high lands being very dangerous, as we experienced by the oversetting of the gig, by which Lieutenant Hawkey was nearly drowned. Two other boats were also nearly lost in the surf, by which unlucky accidents my own watch and four others were totally spoiled, causing, in our situation, a very serious and irremediable evil.

Refreshments for a ship's crew are by no means to be procured at Porto Praya on reasonable terms; for lean bullocks of 250lb. weight they at this time expected 40 dollars; for long-haired African sheep, 4 dollars each; milch goats, 2 to 3 dollars; pigs of 50lb. (a long-legged and long-sided breed), 5 dollars; large turkies, $1\frac{1}{2}$ dollar each; small long-legged fowls, 6 for a dollar. A few Muscovy ducks were seen in the country, but no geese. For bullocks or sheep, bills or cash are alone taken; but all other stock, as well as fruit and vegetables, which usually belong to negroes, may be most advantageously procured in exchange for any articles of wearing apparel, or for blankets. Monkeys are offered for sale by every negro, and unless a prohibi-

tion is issued, the seamen will always fill a ship with these mischievous animals. The only species here is the green monkey (*Cercopithecus sabæus*).

CHAPTER II

Passage from Porto Praya to the Mouth of the Zaire.

CHAPTER II.

HAVING completed the Congo's caulking in the evening of the 10th, I should have quitted Porto Praya the following morning, but it being Holy Thursday, consequently a great festival with Catholics, all the free inhabitants, drest in their best attire, were occupied the whole day in church ceremonies, which not permitting them to attend to worldly concerns, we could not get our business settled on shore, and were therefore obliged to defer sailing until the next day, in the afternoon of which we again got to sea.

In compliment to the religion of the place, we this morning, it being Good Friday, hoisted the colours half-mast, the fort having done so, and the Portuguese vessels putting themselves in mourning by topping their yards up and down.

At sun set the Peak of Fogo was seen nineteen leagues distant.

A moderate trade-wind between N. E. and E. N. E. continued until the 18th, when in latitude $7\frac{1}{2}^{\circ}$, longitude 18° W., we lost it, and got into the region of light variable breezes and very sultry weather, the thermometer rising in the afternoon to 82° and 84° ; the temperature of the sea being 80° and 81° ;

during the nights constant faint lightning without thunder. Many porpoises (*Delphinus phocena*), flying fish, and tropic birds were now seen, and a swallow rested on the yards when 250 miles distant from the land. From the 15th to the 19th the sea represented a continual succession or riplings, and on trying the current with a boat, it was found to set to the S. E., at the rate of $\frac{3}{4}$ of a mile an hour, nearly agreeing with our chronometers.

The towing net, which was kept constantly overboard, gave us for the first time on the 18th, great numbers of perfectly diaphanous crustacea, resembling insects of glass; they were of four different species, and considered by Dr. Smith, as belonging to the genus *Scyllarus*. (La Marc,* p.156.) We also took a small squalus, of a species new to us, and which from the form of its teeth may be named *Squalus serrata*.

On the 19th the first deluge of rain was experienced in a heavy squall from N. E., and was the commencement of that succession of squalls, calms, and rains, which would seem to be entailed as an everlasting curse on this region of the Atlantic; in consequence of which, from this time till we passed the meridian of Cape Palmas, our progress was exceedingly slow, never exceeding 40 miles a day, and sometimes making no progress at all. The winds, when there

Similar crustacea were taken during the rest of the passage in greater or less numbers until we made the continent of Africa.

were any, were between E. N. E. and S. W., but mostly southerly. Our only amusement now was the taking of sharks, all of the white species (*carcharias*), except one of the blue (*glaucus*), and the only one seen during the passage; the largest of the former was a male, ten feet long, the latter a female impregnated, seven feet long; she was unattended either by pilot-fish or sucking-fish, while the white sharks had many of both accompanying or attached to them. It was observed of the pilot-fish (*Gastroteus ductor*), that they took especial care to keep out of the way of the shark's mouth, generally playing over the hinder part of his head. The shark was also observed to lift the head above water and seize objects floating, without any change of position. One shark was seen to leap out of the water and seize a small albicore while it was itself in pursuit of a flying-fish.

The first bonitos (*Scomber pelamis*) were seen on the 25th, in latitude $5^{\circ} 53'$, and many cavally or shipjack sported after showers of rain, while flocks of tropic and other oceanic birds hovered over the riplings they caused, in order to seize the flying fish frightened from their element.

On the 26th, in latitude $6^{\circ} 16'$, longitude $13^{\circ} 45'$, the temperature of the sea at the depth of 220 feet was 64° , that of the surface being 80° , and of the air 81

Since the commencement of the rains every additional precaution was taken to guard against the effects of the damp sultry weather on the people; they were never exposed to the rain when it could be avoided, and when unavoidably wetted, they were obliged to put on dry clothes as soon as possible, occasionally receiving a small glass of spirits when shifted. The humidity of the air between decks was dried up by frequent fires, and the bedding often aired. The large quantity of water I had shipped in the river enabled me to afford a proportion for washing the people's clothes twice a week, until now, when the rain water saved by the awnings was put by for the purpose.

From the very commencement of the voyage, I had much difficulty in *forcing* the observance of general regulations for cleanliness, and the consequent preservation of health on the transport's crew; for the master and mates, like the generality of merchant seamen, considering all such regulations as useless, took no steps to enforce them, nor could I even get the hammocks brought on deck after our arrival in the warm latitudes, until I had recourse to coercion, and the punishment at the gangway of one of the most refractory of the crew, which effectually broke up the confederacy that seemed to have been formed to resist all my orders on this subject.

The currents, from leaving Porto Praya until in latitude 6° , longitude 15° , set to the south and S.E.; they then changed to the N.E. and E.N.E., with various degrees of velocity, from 8 to 40 miles a day, and retained this direction until we made Prince's Island.

The winds until the 5th of May, when we crossed the meridian of Cape Palmas, at the distance of 15 leagues from that Cape, were very light and variable, between south and S.W. The greatest heat of the atmosphere was 85° in a clear calm at 2 P.M., and the least 74° after heavy rain; the rain water as it fell being at 75° . The various trials of the temperature of the sea gave between 81° and 82° at the surface, and 63° to 64° at the depth of 200 fathoms. A large shoal of the bottle-nose porpoise or dolphin of naturalists, (*Delphinus delphis*) was seen; flocks of tropic birds, and a few men-of-war birds (*Pelicanus aquila*) now also accompanied our course. It was observed that the former bird fishes in the manner of the gull, flying low, and seizing its prey only at the surface, and often sitting on the water; while the man-of-war bird soars very high, hovers on the wing like the kite, and darts perpendicularly on its prey, diving after, and carrying away, the largest flying-fish into the air.

After passing Cape Palmas, the light southerly air was

succeeded by moderate breezes from S. S. W. and S. W. with which we stood close hauled across the Gulf of Guinea ; but the strong N. E. currents prevented our making any southing. The weather, in crossing the Gulf, was always extremely cloudy, with frequent drops of rain, and much less sultry, the thermometer varying between 80° and 78°.

May 6th. Until this time the Naturalists were obliged to content themselves with the small animals the towing net afforded them, but they were now gratified by the capture of albicore and bonito, many of both being taken by the grains and hook. The most apparent distinctive characters of these two species of the *Scomber* are the following. The albicore (*Scomber thynnus*) has 14 rays in the first dorsal fin, 8 small false fins on the back, and the same number on the under side ; the dorsal, anal, and false fins are strongly tinged with orange, the under part of the sides of the fish marked with transverse whitish stripes, the palate studded with boney points. The foremost dorsal fin of the bonito (*Sc. pelamis*) has 16 rays, the false fins are eight on the back, and only seven beneath. These fins have no orange tinge ; the under sides are marked longitudinally with four black stripes, and the palate is quite smooth.

If the esteemed tunny-fish of the Mediterranean and the albicore of the Atlantic be the same species, there seems to

be an enormous difference in their sizes. The tunny-fish arriving at the weight of 8 to 12 cwt. while the largest albacore I have ever seen taken in the Atlantic weighed but 160lbs. and the most common weight was between 30 and 40lbs. and these latter were evidently full grown fish.

On the 11th we had full moon, and the same day and the next, such heavy rains fell, that I feared the wet season had already set in to the north of the line, we being on this day in $2\frac{1}{2}^{\circ}$ N. and $1\frac{1}{2}^{\circ}$ E. By a rain guage made on board, we found that, on the morning of the 12th, between 1 and 4 o'clock, the water that fell from the heavens was equal to $3\frac{3}{10}$ inches. On this day died Joseph Burgess, seaman, of the Congo; on opening him, his death was found to have been occasioned by a disease of the heart caused by the ancient rupture of a blood vessel.

Though the rains lasted but two days, seven of the transport's crew were already attacked by fevers, more or less serious, all of which were to be traced to their sleeping on the wet decks, and to the neglect of changing themselves after being exposed to the rain during the day. The almost inevitable bad consequences of carelessness in these respects, may be estimated by the state of the thermometer at night in various parts of the ship. In the space called between deck, where the people slept, it was 88° , in my cabin 79° or 80° . On deck 73° to 77° . The great evapo-

ration from the decks, &c. after rain, being found to lower the thermometer a degree or more below the temperature of the rain in falling. With respect to my own people, I obliged them to wear flannel next their skin, in addition to the other precautionary regulations; and the good effect of these precautions was fully evinced in the continued good health of the crew, one or two only (and these were proved to have neglected them) being slightly attacked with symptoms of fever, which gave way by immediate bleeding, and gentle cathartics.

May 14. The bird named booby (*Pelecanus sula*) now frequently settled on the yards in the dusk of the evening, and two of them were taken; the external characters of these birds seem by no means to authorise their being placed in the genus of Pelican. Of the two individuals now taken, the largest measured 18 inches from the point of the bill to the extremity of the tail, and weighed seven ounces; the plumage a rusty brown, deepest and rather glossy on the upper side of the wing quill feathers, the crown of the head only being of a dove colour, lightest towards the forehead. The upper sides of the wing quill feathers black, the under side a dirty white; the bill conical, slightly curved; the nostrils very open, being two wide longitudinal slits on the sides of, and about the middle of the upper mandible; the eye a dark brown approaching to black, surrounded by a

circle of minute white feathers ; three toes full webbed, the fourth toe behind very small, and quite free ; bill and legs black. This specimen on examination proved to be a full grown male.

The second specimen, which was found to be a young female, was somewhat less than the first ; the dove colour on the crown of the head was deeper, nearly mixing with the general brown ; and the circle of minute feathers round the eye was black ; it differed in no other respects from the male. These birds were observed generally in pairs ; they fly close to the water with the neck stretched out and the tail spread.

On the 16th, at day-light, Prince's island was in sight, bearing S. E. 12 or 14 leagues ; our approach to it the preceding day having been denoted by great numbers of fishing birds, apparently different species of gulls.

The swarms of albacore round the ship were now such as almost to justify the hyperbole of their obstructing the ship's way ; and twenty a day was the usual success of our fishery with hook and line, the flying-fish found within them serving as bait. The proportion of bonito appeared to be small, not one being taken to 10 albacores. The flying fish, in endeavouring to escape from their cruel enemies, skimmed the surface like flights of birds, and it was ob-

served, that when they rose in the direction of the wind, they could reach a considerable distance, but when against the wind, they dropped again almost immediately; when the rise was in an oblique direction to the wind, they sometimes described a considerable curve, until they got before the wind, and this without any assistance from the wings, the only movement of these members being at the moment of their quitting the water, when they had for a few instants a quick fluttering motion. Four different species of these fish were taken.

After passing Cape Palmas and entering the Gulf of Guinea, the sea appeared of a whitish colour, growing more so until making Prince's island, and its luminosity also encreasing, so that at night the ship seemed to be sailing in a sea of milk. In order to discover the cause of these appearances, a bag of bunting, the mouth extended by a hoop, was kept overboard, and in it were collected vast numbers of animals of various kinds, particularly pellucid *Salpæ*, with innumerable little crustaceous animals of the *Scyllarus* genus attached to them, to which I think the whitish colour of the water may be principally ascribed. Of *Cancers*, we reckoned 13 different species, eight having the shape of crabs, and five that of shrimps, and none more than a quarter of an inch in length; among them the *Cancer*

fulgens was conspicuous. In another species (when put into the microscope by candle light), the luminous property was observed to be in the brain, which, when the animal was at rest, resembled a most brilliant amethyst about the size of a large pin's head, and from which, when it moved, darted flashes of a brilliant silvery light. Beroes, beautiful holothurias, and various gelatinous animals were also taken up in great numbers. Indeed the Gulf of Guinea appears to be a most prolific region in these sort of animals ; and I have no doubt but the marine entomologist would here be able to add immensely to this branch of natural history. As it was found impossible to preserve the far greater number of these animals by reason of their delicate organization, the spirit of wine dissolving some, and extracting the colours of others, and as most of them require the aid of a microscope to describe them, a great portion of them were lost on us, from the want of a person either to describe or draw them from that instrument.

Light baffling winds from south to S.W. kept us in sight of Prince's island until the 18th, when a hard squall from the S.E. brought to our view that of St. Thomas, which at day-light on the 19th bore S. by W., distant 19 leagues. We were again plagued with light winds for two days off this island, when another squall from the S.E. ran us clear of

it to the west; but the wind soon returning to south, and blowing fresh, we were unable to weather it, and I thought it advisable to stand off to the W. S. W. in the hope of making southing; accordingly we crossed the line in this course on the 23d, and in the meridian of $4\frac{1}{2}^{\circ}$ E.

From the time of our making St. Thomas, we experienced a current setting to the W. N. W., encreasing in velocity as we went to the westward, until on the line it set 33 miles in 24 hours. Finding we made little southing, the wind still hanging obstinately at south, we tacked on the 24th to the eastward, and on the 27th passed to the south of St. Thomas, within 5 leagues, our latitude being $0^{\circ} 17' S.$, so that we had gained but 45 miles southing in 6 days, owing to the strong northerly currents, although in this track the latest chart of the Atlantic marks a strong southerly current.

While in sight of the two islands above mentioned, the weather was so very cloudy that we could see little more than their outlines. Towards the south end of Prince's island are two whitish ravines; but whether this colour is from the nature of the ground, or from the excrement of birds (of which there are immense numbers round the island) we could not ascertain. St. Thomas, which we approached within 7 or 8 miles, appears to be wooded up to the summit of what is rather improperly called the **Peak**

of St. Anna, being little conical, but rather a round topped mountain, of the probable elevation of 7 or 8000 feet, with a gap in the summit. Off the north end, the rock or islet named *Mono Cacada* (significant I suppose of its being covered with the dung of birds), leaves a considerable open space between it and the main island.

Our chronometers gave the longitude of the north end of Prince's island 7° ; the variation, by the mean of many observations, $21^{\circ}22'$ W. The same watch makes the N. W. point of St. Thomas in $6^{\circ}31'$, and Rolle's island, at the south end, in $6^{\circ}44'$; the variation at this end of the island $22^{\circ}7'$.

The winds now came more westerly, but were at the same time so light, that our progress was most tiresomely slow; I therefore determined to make the continent, in the hope of finding land and sea breezes in shore; and accordingly we first saw it on the morning of 3d of June, and at noon were three leagues off shore in 16 fathoms, latitude observed $2^{\circ}10'$ S.; the land very low and entirely covered with wood.

The atmosphere for the two days before making the land, had become so saturated with moisture, that the hygrometer at noon marked 5° , and the thermometer stood at 71° . At 7 o'clock in the evening a dew, little less penetrating

than rain, began to fall, and continued the whole night, with so sensible a degree of cold, that instead of melting under an equinoctial sun in the lightest cloathing, as our gentlemen expected, they were glad to resume their woollens.

The albigores which had accompanied us in vast shoals to the edge of soundings, and were taken in such numbers, that besides being consumed fresh to satiety, the crews of both vessels pickled and salted several barrels, now entirely disappeared, and with them the sea birds; the white colour of the water changed to the oceanic blue before we struck soundings, the marine animals much decreased, and the sea lost a great portion of its luminosity.

From the 3d to the 8th we were plagued with light airs, veering towards midnight to the west as far as S. W., and having for an hour or two sufficient strength to send the ship two or three miles an hour, then again dying away to light airs, which in the morning veered to south and S.S.E.; these variations being the only signs of the mutual re-action of the land and sea on the atmosphere; and indeed we experienced similar variations morning and evening since making Prince's island.

The nature of this part of the coast is doubtless the cause of the want of more marked alternate breezes from the land

and sea: here the land is very low, and entirely overgrown with wood, which causes the atmosphere over it to preserve nearly an equal temperature day and night; this temperature by reason of the great evaporation from the wood (which, as I before observed, saturates the atmosphere with moisture), seems even for the greater part of the 24 hours somewhat less than that of the sea; and hence the light breezes that blow from the land, or between south and S. E. for 18 hours of the 24, or from six o'clock in the morning until midnight, when the evaporation having ceased for some hours over the land, the temperature becomes a little higher than that of the sea, and produces a short and weak breeze from the latter.

The general range of the thermometer while in with the land was at 6 A. M. 71° .; at 2 P. M. 73° .; at 9 P. M. 70° .; the temperature of the sea at 2 P. M. 72° . The hygrometer varied during the day from 5° to 15° .

The dredge was put over board, and brought up two or three species of *echini*, some small *cancris*, bits of coral, &c. While in soundings no fish were seen, nor any birds except an occasional solitary tropic bird or pair of boobies.

The longitude of the coast in the latitude of $2^{\circ} 10' S.$ our chronometers make $9^{\circ} 40'$, and by \odot and \sphericalangle $9^{\circ} 51'$. The bank of soundings stretches off about 10 leagues from the land, deepening regularly as follows.

Fathoms.

About 9 miles off shore,	16,	oozy sand.
18	ditto,	30, brown sand.
24	ditto,	47, ditto and broken shells.
28	ditto,	67, ditto.
30	ditto,	no bottom at 120.

Although we took every advantage of the variations of the wind, to stand off and in shore, the lightness of the breezes, and a daily current of fifteen miles to the north and N. N. E. permitting us barely to hold our ground, I determined again to stand off out of soundings, in the hope of losing the current and getting fresher breezes. In both respects I was, however, disappointed ; for though the current became more westerly as we went off shore, its velocity encreased at the same time to 30 and 40 miles a day. The winds still remaining very light in the morning from S. S. E., and from S. S. W. in the evening, while the transport being extremely leewardly, and both she and the Congo sailing very badly in light winds, our progress was slower than ever. In this choice of difficulties I again stood in for the land, hoping, that as we were now past the low land to the north of Loango, we should meet more regular land and sea breezes. We in consequence made the land on the 18th in $3^{\circ} 24'$; thus having gained but 75 miles southing in 15 days, by working out of soundings.

In this most tedious fortnight we found little to amuse us ; birds and fishes seemed to have forsaken this region ; a single swallow or martin being the only one of the former seen ; the towing net, however, again afforded us abundance of marine animals, amongst which were many of the paper nautilus (*Argonauta sulcata*), with the living animals, which, in contradiction to the opinion of the French naturalists, proved to be perfect *Octopi*.* When forty leagues from the land, several floating patches of reeds and trees passed us, proving, if our chronometers had not shewn it, the existence of a strong western current. The day we made the land a dead albatross (*Diomedea exulans*), was picked up floating in a putrid state ; which seems to shew that these birds wander farther towards the equator than is generally supposed. The same day a whale (apparently a species of the *Physeter*, having large humps behind the back fin), struck our rudder with his tail in rising, and one of these fish rose directly under the Congo ; and, according to the expression of those on board her, lifted her almost out of the water. These animals indeed were now extremely numerous.

This day a vessel was seen for the first time since leaving Porto Praya ; from her warlike appearance and superior

* L'animal qui forme cette coquille ne peut être un poulpe La Marc, *Animaux sans Vertèbres*, p. 99.

sailing, she was at first supposed to be a ship of war; but on approaching us she hoisted English merchant colours, and keeping half-gun shot to windward, we were unable to speak her; nor did she seem to have any desire to communicate with us. This circumstance, together with her apparent force and preparation for defence, having 18 guns run out of her between-deck ports, with the tompions out, left little doubt of her being employed in a forced and illicit slave trade. Her anchor a-cock-bill, and her tacking with the variations of the wind, proved her to be working along shore to the south.

The land and sea breezes, though now more regular, as to time, (the former setting in about four in the morning from N.E. to S.E., and the latter from two to four in the evening from S.W.) were so faint and of so short duration, that neither afforded us a run of more than ten miles, while the current setting one mile an hour to the north, we remained in sight of Mayumba bay until the 24th, anchoring whenever we found we lost ground.

The land to the north of this bay presents an undulating line, Cape Mayumba being the highest point, and forming a little hummock. Point Matooly, the south point of the bay, also forming a hummock, descending gradually to the south into a line of low even land. The bight of the bay

is also low land, with a saddle hillock in the centre of the back ground. The whole of this land is covered with wood, but is proved to be inhabited by the numerous fires seen on the shore, and which were probably intended as signals for us to land.*

We now, while at anchor on a sandy bottom, took a good number of fish of the *Sparus* genus, named by the seamen sea-bream, and light-horsemen, the latter, from a reddish protuberance on the back of the head (fancifully thought to resemble a helmet); they were taken with the hook close to the ground, and baited with fresh pork or their own livers; the largest weighed 18lbs., and though rather dry and insipid, were infinitely preferable to the albicore and bonito with which we had been surfeited in the gulf of Guinea. Sea birds had also entirely disappeared, with the exception of an occasional tropic bird, and a few of *Mother Carey's* chickens (storm petterel). Numbers of insects of the genus *Tipula* were taken from the surface of the sea.

The weather, though now much less damp than when we made the land to the north, was still very hazy, and the cold even encreased, the thermometer in the day never rising above 73°, and falling in the night to 67°. As the moon approached the full, the current diminished, and on the 24th a more favourable sea breeze than we had hitherto

experienced, carried us along shore until the evening, when we anchored in ten fathoms. The land south of Mayumba to $3^{\circ} 50'$, has an agreeable appearance, rising in a series of three or four gentle elevations from the sea inland, the farthest and highest not deserving the name of hill; the whole covered with wood, except in some spots which were bare of wood, and resembled spots of burnt-up grass. A sandy beach margins the sea, which breaks in a surf that must prevent the access of an European boat, unless some of the many projecting points give shelter to coves where a landing may be effected. The soundings are here very regular, altering about a fathom in a mile, and the depth at six miles off shore ten fathoms. The bottom is extremely various, but sand predominates, brown, black, white, with sometimes quartz pebbles, small lumps of yellow ochre, bits of corals, and fragments of shells of the cockle and venus genera.

Never did lover wait more anxiously for the hour of assignation with his mistress, than we now did for that of the usual setting in of the sea breeze, on which alone we found we must depend to finish this eternal passage, for the land winds were so faint as not to render us the smallest service, and the currents the day after new moon returned with increased velocity.

On the 28th we had reached the latitude of $4^{\circ} 30'$, and found the land we passed from $3^{\circ} 50'$, more picturesque than to the north; the variety of elevations being here greater, and the clear spaces more numerous; these we were however now led to think the signs of barrenness rather than of fertility, having, when viewed near, the appearance of tracts of naked reddish clay.

We were now opposite to Loango bay, the red hills on the north side of which (formed by clay of the appearance above mentioned) we anchored off, in 16 fathoms mud, at about 8 miles distance. The next afternoon, when the sea breeze set in, we weighed; but it again dying away, we found ourselves carried towards the land by the current, and again let go the anchor in 12 fathoms; but before the ship brought up we were in 8 fathoms on a reef of rocks, over which the current ran to the N. N. E. two miles an hour. The south point of the bay (Indian Point) bearing S. E. The sea breeze freshening, we cut our cable, and leaving the stream anchor behind us, made sail and deepened gradually over the rocky bottom until in 12 fathoms, when it again became soft and mud.

This reef is in about latitude $4^{\circ} 30'$ (an observation at noon possibly erring 2 or 3 miles, the horizon being bad), and it lays seven miles off shore; towards which latter

we sounded for three cables lengths, and found $7\frac{1}{2}$ fathoms, nor is it probable that there is much less until near the shore, between which and the ship many whales were seen sporting, and they doubtless would not go into very shoal water.

The position of Loango bay is most erroneously laid down in the latest charts, the latitude of Indian Point being $4^{\circ} 37'$ (we were in $4^{\circ} 39'$ at noon of the 29th, by good observation, when the pitch of the point bore E. $\frac{1}{4}$ S. true bearing). The description of the land however in Laurie and Whittle's chart is sufficiently exact, and particularly so with respect to Indian Point, which strongly resembles the Bill of Portland, but of a greater length. The north side of the bay is formed by reddish land of moderate elevation, with ravines or fissures resembling chalky cliffs discoloured by the weather. These high lands descend gradually to the low land at the bottom of the bay; Indian Point also falls gradually towards the south into low land entirely covered with wood. Here the water was first observed to have a deep red tinge as if mixed with blood, but on being examined in a glass was found perfectly colourless; the bottom however seems to account for this appearance, being a soft mud composed of a reddish clay without the smallest mixture of sand, and so smooth that it might be laid on as paint. The only fish taken since we have been

in muddy ground were two toad fish (*Diodon*) and several eels, one of which measured in length 4 feet 10 inches and in circumference 7 inches.

On the 30th June we anchored in the evening off Malemba point, in 15 fathoms, and on the morning of the 1st, were surprised by a visit from the Mafook or king's merchant of Malemba, accompanied by several other negro gentlemen, and a large cortege of attendants in an European built four-oared boat and two canoes, one of which latter preceded the boat to announce the great man, and the officer in her introduced himself by letting us know, that "he was a gentleman, and his name was Tom Liverpool." The first question put by the Mafook on his coming on board was "if we wanted slaves;" nor could we for a long time convince him in the negative, observing that we were only merchant ships, and particularly from our numerous boats. Having at last made him understand the motives of the expedition, and informed him that no nation but the Portuguese were now permitted to trade in slaves; he very liberally began to abuse the sovereigns of Europe, telling us that he was over-run with captives, whom he would sell at half their value, adding, that the only vessel that had visited Malemba for five years was a French ship about a year before this time; and according to him,

the Portuguese government had prohibited their subjects from trafficking in slaves to the north of Cabenda, where there were now nine vessels bearing their colours, and one Spaniard. The Mafook however acknowledged that they sometimes sent their boats from Cabenda to Malemba to procure slaves, and indeed we saw an European boat sailing between the two ports. From the description of the vessel hoisting Spanish colours at Cabenda, there could be no doubt of her being the ship we passed on the 18th.

The Mafook finding we did not want slaves, offered to supply us with fresh provisions ; and as I knew we should, as usual, be obliged to anchor in the evening not far from our present station, I accepted his offer of sending his boats on shore for that purpose, he himself desiring to remain on board for the night with eight of his officers, doubtless in the expectation of having a glorious dose of brandy, which in fact they swilled until they could no longer stand.

The dresses of these gentry were a singular medley of European and native costume ; the Mafook had on a red superfine cloth waistcoat ; his secretary, an English general's uniform coat on his otherwise naked body ; a third a red cloak edged with gold lace like a parish beadle's, &c. &c. The native portion of the dress consisted of a piece of checked or other cotton cloth folded round the waist, and

a little apron of the skin of some animal, which is a mark of gentility, and as such is not permitted to be worn by menial attendants. A striped worsted cap, or else one of their own manufacture and of very curious workmanship, on the head, completed the useful part of their dress. Their ornaments consisted of rings of iron and copper on the ancles and wrists, welded on so as not to be taken off; and many of the copper ones having raised figures tolerably executed. This metal we understood was abundant in their country. Besides necklaces of beads, the general neck ornament was circles or rings of the bristles of the elephant's tail, called by them *morfil*, and which seemed to be multiplied in proportion to the puppyism of the wearer, the graver or middle aged men having but one or two, while some of the young ones had so many, that they could with difficulty move the head, and reminded us of our Bond-street bloods with their chins hid in an enormous cravat.

All were loaded with fetiches of the most heterogeneous kinds; bits of shells, horns, stones, wood, rags, &c. &c.; but the most prized seemed to be a monkey's bone, to which they paid the same worship that a good catholic would do to the *os sacrum* of his patron saint. The *master fetiche* of the Mafook was a piece of most indecent sculp-

ture representing two men, surrounded by the tips of goat's horns, shells, and other rubbish, and slung over the shoulder with a belt of the skin of a snake. The features of these sculptured figures, instead of being Negro, as might be expected, were entirely Egyptian; the nose aquiline and the forehead high. The canoes are of a single tree; each had five men, who worked them with long paddles standing up. At night our visitors were satisfied with a sail in the 'tween-decks, where they all huddled together, and from which they started at daylight to light their pipes and resume their devotions to the brandy bottle.

As I had expected, we were obliged to anchor, by the failure of the sea breeze opposite to Cabenda, from whence, in the forenoon, a boat came off with another cargo of *gentlemen*; but, as I had been quite sufficiently plagued by my Malemba guests, I excused myself from not being able to receive them on board; the sea breeze being about to set in, and as there was no appearance of the Malemba boat bringing off the stock, I, much against their inclination, sent off my visitors in this boat.

The information we picked up respecting the coast from Loango Bay to the mouth of the Zaire, proved, as we expected, that it is very erroneously laid down in the most recent charts. The only river between Indian Point and

Cabenda is the *Loango-Louise*, and is that marked in the charts by the name of *Kacong*, being by our observations when at anchor nearly opposite to it, $5^{\circ} 17'$. Its opening is between two high lands, and appears to be wide and clear. The country is divided into petty sovereignties, tributary to the king of Loango; the northernmost of these states, after passing Laongo bay, is named Boal, to which succeeds Makongo, of which Malemba is the port; then that of N'Goy, whose port is Cabenda, and which extends along the north side of the entrance of the river Congo. The king of Makongo, or Malemba, resides inland at a town named Chingelé (evidently the Kinhelé of the charts,) but which is *not* situated on a river. From our visitors I procured a vocabulary of their language; they all speaking English to be perfectly understood, and several of them French still more correctly.

While at anchor this day, I sent two boats in shore to look for the bank of Belé, said by Grand Pré to be situated south-west of Malemba, and which, according to him, shoals suddenly from seven fathoms. The boats, however, could not find any bank, but on the contrary, the water shoaled very regularly from where the ship was anchored in 15 fathoms to 5 fathoms within about three miles of the shore, all soft muddy bottom. One of the natives on board

assured us that he had been on the bank in question, with Mr. Maxwell, and that it lies within a short distance of the shore, and nearer to Malemba than Cabenda.

Having weighed with a tolerable sea breeze, we were enabled to stand along shore until eight in the evening, when being in 8 fathoms; the anchor was let go, and the current was found running N.N.W. $1\frac{3}{4}$ mile an hour; an officer being sent in shore to sound, reported that the water shoaled very gradually to three fathoms within half a mile of the shore, near to which is a lengthened reef, with the sea breaking violently, but which seems to shelter the beach within it, and thereby affords landing to boats.

The coast from $4^{\circ} 50'$ is moderately elevated, forming reddish gray cliffs, similar to those near Loango bay; until past Cabenda, when the coast descends to low land covered with wood, (apparently the mangrove) and our view this day terminated on the Red Point of the charts, (Chabaroca point of the natives) which they informed us was the entrance of a little river.

CHAPTER III

Passage up the River to the place where the Congo was left, and from whence they proceeded in the double-boats.

to be guarded in our intercourse with them ; that, by shewing we are prepared to resist aggression, we may leave no hope of success, or no inducement to commit it.

“ In doing this, it is, however, by no means necessary to exhibit marked appearance of suspicion, which would probably only serve to induce the hostility it seemed to fear ; it is, on the contrary, easy to combine the shew of being guarded, with marks of the greatest confidence.

“ In the event of the absolute necessity of repelling hostility for self-preservation, it will certainly be more consonant to humanity, and perhaps more effectual in striking terror, that the first guns fired be only loaded with small shot.

“ Although we may expect to find the idea of property fully known to all the people we shall have intercourse with, it is not to be the less expected that they will be addicted to theft, the punishment of which in savages has been one of the most frequent causes of the unhappy catastrophes that have befallen navigators ; it is therefore urgently advised, not to expose any thing unnecessarily to the view of the natives, or to leave any object in their way that may tempt their avidity.

“ In the distribution of such presents as may be entrusted to those going on shore, great caution is requisite to

ascertain the rank of the persons, to whom they are given, and to proportion the value accordingly, in order, as much as possible, to prevent jealousies.

“ A great cause of the disputes of navigators with uncivilized people is in unauthorised freedoms with their females ; and hence every species of curiosity or familiarity with them, which may create jealousy in the men, is to be strictly avoided ; taking it for granted, that, in a state of society where the favours of the women are considered as a saleable or transferable commodity by the men, the latter will be the first to offer them.

“ As one of the objects of the expedition is to view, and describe manners, it will be highly improper to interrupt, in any manner, the ceremonies of the natives, however they may shock humanity or create disgust ; and it is equally necessary, in the pursuits of the different Naturalists, to avoid offending the superstitions of the natives in any of their venerated objects. Hence, in inhabited or enclosed places appearing to be property, permission should be first sought to cut down trees (particularly fruit-bearing ones,) which, as well as animals, are often held sacred. When no superstitious motive interferes, a few beads will, probably, always purchase the required permission.

“ As it is probable that the different pursuits of the

scientific gentlemen may be as well carried on in company as if separated, it is therefore strongly recommended to them to keep together as much as possible for their mutual support and safety. Should they however think proper to separate in their excursions, it is to be understood that the *two* or *three* marines, who will always be appointed to accompany them, are to remain with the gentleman having the direction on leaving the vessel; and, in order to avoid the possibility of any dispute for precedence in this last respect, the succession in which the Lords of the Admiralty have given me the names of the scientific gentlemen, is to be considered as the established rule, viz. Mr. Professor Smith, Mr. Tudor, Mr. Cranch; and when it shall be thought necessary to send a midshipman or other petty officer to command the escort which may accompany the naturalists, he is strictly directed to comply with the wishes of the gentleman having the direction of the excursion, as far as his ideas of safety will authorise.

“The health of the persons accompanying the naturalists in their excursions will of course be a particular object with those gentlemen, by taking care not to expose them unnecessarily to the sun in the hottest hours of the day, or to the rain, if shelter can be had, and by carrying them as little as possible into swampy tracts.

“ It is most particularly enjoined to every person who may be on shore to return on board, as soon as possible, on seeing the signal for that purpose.”

The scantiness and short duration of the sea breezes and the current kept us nearly stationary, until the 5th, when in the afternoon a fresh sea breeze sprung up at W. S. W. with which we stood to the south, and soon shoaled our water from 22 to 13 fathoms, which depth we carried without alteration until 8 o'clock, when we deepened to 18 fathoms, and the next cast had no ground with 150 fathoms of line ; whence it was evident we were in the deep channel of the river Congo or Zaire, and thus had overshot my intention, which was, in consequence of the expected velocity of the stream, to anchor on the edge of the bank, and take the next sea breeze to cross it. We had now however no alternative but to stand on, and the breeze lasting for near an hour, carried us across the fathomless channel, and we struck soundings in 23 fathoms on this side, as suddenly as we had lost them on the other ; the wind at the same time failing, we anchored in that depth, and found no current whatever ; indeed in the deep channel of the river it must have been insignificant, in comparison with what we had been led to expect, certainly not above two miles an hour.

At daylight of the 6th we found Cape Padron bearing S. b. E. $\frac{1}{2}$ E., and Shark Point S. E. $\frac{1}{2}$ S.; the latitude at noon in the same situation being $6^{\circ} 5'$. At noon weighed with a pretty fresh sea breeze, and ran in for the land between the above points, until within half a mile of the shore, when we had 20 fathoms water. We then bore up towards Shark Point, and immediately lost soundings, nor did we again get bottom with the hand lead until it suddenly struck the ground in 5 fathoms; the anchor with the chain cable was immediately let go, but finding the ship did not bring up, and was drifting from the buoy; I concluded the chain had snapped, and directed another anchor to be let go; but before this was done the ship was in 36 fathoms and still drifting; both the chain and cable were now veered away, and she at last brought up; but fearing she would again go adrift, the kedge anchor, backed by a smaller one, was run out. The Congo sloop, which had let go her anchor in 4 fathoms, also drove, and fell along side of us, but without any other ill consequence than the loss of her anchor and cable, which, by some mismanagement, was suffered to run out end for end. When the ship had brought up we found that she tailed on a mud bank with but 7 fathoms, while under the chains was 14, and under the bows 36. Where we first let go the anchor in $4\frac{1}{2}$ fathoms, there was no current what-

ever, but at the place to which we had drifted it ran $2\frac{1}{2}$ miles an hour to the N. N. W.; but it was here also considerably affected by a twelve hours tide, being almost still water at 5 o'clock in the evening and 6 the next morning.

On heaving up the chain we found that the anchor had broken at the crown. In the forenoon, while waiting for the sea breeze, the Mafook of Shark Point came on board with half a dozen of his myrmidons, and though the most ragged, dirty looking wretch that can be well conceived, he expected as much respect as a prince; first complaining that the side ropes were not proper for a person of his quality (they were only covered with canvas); then insisting on a chair and cushion on the quarter deck; with the latter of which being unable to comply, he was satisfied with spreading an ensign over the former. Seating himself at the taffarel, he certainly made a very grotesque appearance, having a most tattered pelisse of red velvet, edged with gold lace, on his naked carcase, a green silk umbrella spread over his head, though the sun was completely obscured, and his stick of office headed with silver in the other hand. It being our breakfast hour, he notified his desire to be asked into the cabin, to partake of our meal; but he smelt so offensively, and was moreover so covered with a cutaneous disorder, that my politeness gave way to my stomach, and

he was obliged, though with great sulkiness, to content himself on deck. To bring him into good humour, I however saluted him with one swivel, and gave him a plentiful allowance of brandy. He seemed indeed to have no other object in coming on board than to get a few glasses of this liquor, which he relished so well that he staid on board all night and the five following days. From him we learnt that there were three schooners and four pinnaces (all Portuguese) at Embomma, procuring slaves. He also affirmed that the transport could not, at this season, ascend higher than the tall trees, on account of the little water in the channel.

At 2 P. M. of the 8th, a fresh sea breeze coming in, we weighed, but the moment the ship came abreast of Shark Point; she was taken by the current and swept right round; with difficulty her head was again got the right way, and she rounded the point in $4\frac{1}{2}$ fathoms. We then stood on S. S. E. by compass, carrying a regular depth of 7 and 8 fathoms for about 2 miles, when finding her go astern, blowing a fresh breeze with all the studding sails set, let go the anchor in 8 fathoms, and veered 30 fathoms of chain. Shark Point bearing W. b. S. about 2 miles. At 8 o'clock, found the ship driving, and that through the neglect of the men attending the lead; she was already in 16 fathoms, and

the sea breeze being still fresh, we loosed and set all the sails, and let go another anchor, which brought her up. During the night the wind remained light at S. W., and the ship was steered as if under way, though riding taught with all sail set. The Congo, without difficulty, went over the current, and might have run up to the Tall trees, had her signal not been made to come to, and she accordingly anchored opposite Sherwood's Creek.

At four o'clock this afternoon, a schooner appeared off the point, hoisted Spanish colours, and fired a gun; after laying to for some time, she hoisted the royal colours of Spain, fired a shot, which fell near the transport, and ran in and anchored. A boat was immediately sent from her to ask what we were, and on being informed, they made some excuse for firing the shot, intended, as they said, to assure the colours; their vessel, by their account, was from the Havannah for slaves; but it was perfectly evident, from their answers to my questions, that she was illicitly employed in this trade, and prepared to carry it on by force, being armed with 12 guns, and full of men: this was indeed put out of doubt on the return of her boat on board, by her getting under way and again running out of the river; doubtless from apprehension of the sloop of war, which they were told was gone up the river. This vessel was destined

to take off 320 slaves; her burthen being 180 Spanish tons:

The sea breeze setting in fresh at 2 P. M. on the 9th, and finding the ship under all sail go ahead of her anchor, we weighed, but, though the current was running scarcely three miles an hour, she at first barely stemmed it, and soon went astern; deepening the water so rapidly, that finding we should be out of soundings before we could bring up, I had no alternative but to run out again and try to anchor under Shark Point; but so little effect had the sails, even when going with the current, that she drifted bodily on the Moena Moesa bank, on which I was just about to let go the anchor in 7 fathoms, when the sea breeze becoming suddenly and providentially very strong, we got her to stay, and again just fetched Shark Point, where the wind again failed, and we were driven round by the current, and again obliged to stand out. The wind however once more freshening at sunset, after making a short tack off, we stretched in, and were fortunate enough at 7 o'clock to get to an anchor under Shark Point in $4\frac{1}{2}$ fathoms; an attempt, which I should have considered highly imprudent had I not examined the bank, and taken accurate marks; nor indeed had I any other alternative but that of finding myself off Cabenda in the morning had I kept to sea.

The three succeeding days, there being either no sea breeze, or only such as was too weak to attempt any thing with our brute of a transport, we were obliged to remain at anchor, rolling gunnel in, from the ground swell on the bank; consoling ourselves however that, of the three evils which threatened us, we had escaped the two worst, either being obliged to anchor on the Mazea bank, or being driven by the current to the northward, God knows where.

Our Shark Point visitors were now succeeded by the Mafook of Market Point and a *gentleman* from Embomma, who told us he was sent by the Great Mafook of that place to accompany us up the river, in order that no accident should happen to us; and though I would very gladly have foregone the pleasure of their company, I could not refuse receiving them on board. I however endeavoured to make them clearly understand that they were not to expect the same attentions on board a *King's ship* (I was sorry to be obliged to disgrace the name by applying it to the detestable transport,) which they had been used to receive from slave traders; and the uniforms of the officers, and the marines, seemed to give them the proper feeling of our consequence.

Several of the Sonio men who came on board were Christians after the Portuguese fashion, having been converted by missionaries of that nation; and one of them was

even qualified to lead his fellow negroes into the path of salvation, as appeared from a diploma with which he was furnished. This man and another of the Christians had been taught to write their own names and that of Saint Antonio, and could also read the Romish litany in Latin. All these converts were loaded with crucifixes, and satchels containing the pretended relics of saints, certainly of equal efficacy with the monkey's bone of their pagan brethren; of this we had a convincing proof in each vociferating invocations to their respective patrons, to send us a strong wind; neither the fetiche or Saint Antonio having condescended to hear their prayers. The Christian priest was however somewhat loose in his practical morality, having, as he assured us, one wife and five concubines; and added, that St. Peter, in confining him to *one* wife, did not prohibit his solacing himself with as many handmaids as he could manage. All our visitors, whether Christians or idolators, had figures raised on their skins, in cicatrices, and had also the two upper front teeth filed away on the near sides, so as to form a large opening, into which they stuck their pipes, and which is so perfectly adapted to the purpose that I thought it expressly formed for it; until on enquiry I learned, that, as well as the raised figures on the skin, it was merley ornamental, and principally done with the idea of rendering themselves

agreeable to the women, who, it seems, estimate a man's beauty by the wideness of this cavity, which in some measured near an inch, the whole of the teeth, and particularly the two front ones, being enormously broad, and very white.

Our Sonio visitors were almost without exception sulky looking vagabonds, dirty, swarming with lice, and scaled over with the itch, all strong symptoms of their having been *civilized* by the Portuguese, and in their appearance and manners forming a striking contrast, not unimportant to the study of national manners, to our Malemba guests, who were chearful, clean, drest even to foppishness, and *choquéd* their glasses with us ; in short, quite gentlemen *à la Française*, the nation with which they have had most intercourse. Some canoes brought on board a few pigs, goats, fowls and eggs, for sale, but the prices they asked were so exorbitant, that for fear of spoiling the market up the river, by their reports of our facility, I confined myself to the purchase of a few fowls and eggs. The value they here set on our different articles for barter was by no means in the proportion of their respective English prices ; for an empty bottle, a looking-glass, or knife, invoiced at 3d, we got a full grown fowl, while for a bunch of beads that cost 2s. 10d. they offered but two ; and for a small goat, they wanted four fathoms of blue baft. We however purchased for a mere

trifle, a fresh water turtle weighing 40lb., which, when drest, we found equal the green turtle.

The method of closing a bargain, and giving a receipt, is by the buyer and seller breaking a blade of grass or a leaf between them, and until this ceremony is performed, no bargain is legally concluded, though the parties may have possession of each other's goods; this we only learned by experience, for having bought, and, as we thought, paid for a couple of fowls, they were immediately slaughtered for dinner, but the owner taking advantage of the omission of the ceremony, pretended that he had not concluded the bargain, and insisted on another glass, which we were obliged to give him, but profited by the lesson.

During our forced detention at Shark point, the Naturalists made some excursions on shore, and were gratified in their respective pursuits, particularly Dr. Smith, who procured many interesting plants. Mr. Cranch shot some birds, amongst which were an eagle, an anhinga, several varieties of the king fisher, a toukan, and many small birds. Near the shore, these gentlemen saw, close to a place where had been a fire, human skulls and other human bones. Observing the natives take considerable numbers of fish with nets, we sent two boats to haul the seine at day-light of the 11th. On the outside of the point they were entirely

unsuccessful, not taking a single fish, but on the inside, in one haul, thirty large fish were taken, some weighing 60lbs ; these were all of one kind, of the *Sparus* genus, and named *Vela* by the natives. They were found to be excellent in taste and firmness, much resembling the cod. The only other species taken were a single large cat fish (*Lophius*) and a few small mullets.

July 12. I now determined to lose no more time in the attempt to get the transport up the river, but to extricate myself from this exquisitely tantalizing situation by the immediate transshipment of the provisions and stores to the Congo ; for which purpose the double boats, and all the ship's boats were hoisted out, on the evening of the 12th, and the double boats being put together and rigged, the whole were next morning loaded ; when therefore the sea breeze set in at two o'clock in the afternoon, I took my leave of the transport, with the Naturalists, leaving the master and purser to see her discharged, or get her up the river if an opportunity offered. I had now the satisfaction to find the double boats answer my best expectations in their fitness for this service ; for though the breeze was very light, and the current running round Shark point three miles an hour, they without difficulty doubled this, to us more redoubtable promontory than that of Good Hope to our early navigators,

and in two hours and a half we reached the Congo sloop, laying about ten miles from the point.

The berth she occupied I found was about half a mile from the south shore, nearly opposite Sherwood's creek, (Fuma of the natives). The current here at its maximum ran $3\frac{1}{2}$ miles an hour, but was subject to very great irregularities, apparently from the combined effects of a regular tide, and of eddies formed by the points of land or banks. These effects were frequently so great as to entirely overcome the stream, and create perfect slack water of various duration from half an hour to five minutes. The rise and fall of tide by the shore, as marked on the roots of the mangrove, was $2\frac{1}{2}$ feet. The water thus high is too brackish for use, and though perfectly colourless in a glass, has the same red appearance as we remarked off Cabenda.

Hitherto the river has presented no appearance to inspire the idea of magnitude equal to that of a river of the first class; unless we were indeed to consider the estuary formed between the Sonio and Moena Mazea shore, as the absolute embouchure of the river, than which certainly nothing would be more erroneous; the true mouth of the river being at Fathomless Point, where it is not three miles in breadth; and allowing the mean depth to be 40 fathoms, and the mean velocity of the stream $4\frac{1}{2}$ miles an hour, it

will be evident that the calculated volume of water carried to the sea has been greatly exaggerated.

The peninsula of Cape Padron and Shark Point, which forms the south side of the estuary, has been evidently formed by the combined depositions of the sea and river, the external or sea shore being composed of quartzzy sand, forming a steep beach ; the internal or river side, a deposit of mud overgrown with the mangrove ; and both sides of the river towards its mouth is of similar formation, intersected by numerous creeks, (apparently forming islands) in which the water is perfectly torpid. This mangrove or alluvial tract appears to extend on both shores about seven or eight miles inland, where the elevated and primitive soil then occurs, and the outline of which is frequently caught from the river, through vistas formed by setting fire to the mangrove, or over the creeks. This mangrove tract is entirely impenetrable, the trees growing in the water, with the exception of a few spots of sandy beach. Small islands have in many places been formed by the current, and doubtless in the rainy season, when the stream is at its maximum, these islands may be entirely separated from the banks, and the entwined roots keeping the trees together, they will float down the river, and merit the name of floating islands. At this season however, they are

reduced to occasional patches of a few yards of brush wood, or reeds, which, gliding gently down the stream, convey the idea of repose rather than the rush of a mighty river.

Lieutenant Hawkey proceeded up the creek opposite to which the Congo was anchored, and describes it "as dividing into two branches, one having a direction E. by S. and the other W. by N., the former of which he followed, and found it extremely tortuous; after passing twenty reaches in directions almost opposite, he reached the primitive land, composed here of sandy precipitous cliffs; the soil in some spots bare, in others covered with wood, particularly with the *Adansonia* or baobab. Here we met with the excrement of elephants, tygers, and other animals both herbivorous and carnivorous; the skeleton of the head of a wild hog was picked up, and an antelope was seen; on the sandy beach close to a pond of stagnant fresh water were many birds, where the river turtle had deposited their eggs."

Many canoes visited the Congo, with pigs, goats, fowls, and eggs for sale, but being almost as exorbitant in their demands as at Shark Point, we did little business; some trading canoes with 10 to 20 men in each, going up and down the river, also stopped along side to satisfy their

curiosity. Their general cargoes were salt, and palm nuts, from the latter of which they extract oil. The salt is procured from the north shore, in the district of Boolambemba, near Fathomless Point. In one of these canoes were also an elephant's tooth and a boy for sale.

From the natives who were on board we learnt that the King of Sonio resides at Banza Sonio, on a fresh water river, the entrance of which is the creek marked in Maxwell's chart "Raphael's creek," and that a boat would be twelve hours ascending to the town, though the current is trifling. We also now learnt how the human bones came in the place where they were seen by the Naturalists near Shark Point, and which, without an explanation, might have led to the supposed cannibalism of the natives; we were however assured that they were the remains of criminals, who had suffered for the crime of poisoning, this spot being the place of execution of a certain district. When a common man is convicted of this crime, his head is first severed, and his body then burnt; but the punishment of a culprit of superior rank is much more barbarous, the members being amputated one by one, so as to preserve life, and one of each sent to the principal towns of the kingdom, to be there burnt. The trial is always by a kind of ordeal.

This afternoon the transport weigh'd with the sea