

## CHAPTER IV.

The Galapagos Islands — Charles Island — James Island — Chatham Island — Coast of Ecuador — Bay of Atacamas — Ramble in the Forest — Mr. T. Edmonston — His Death and a sketch of his Life — River Esmeraldas — Gallo Island.

ON the 1st of January, 1846, we departed for the Galapagos Islands, and, carried along by the trade-wind, made on the 6th at daylight Gardiner's Island, and at noon the south end of Charles Island. Standing to the northward, along the south-west shore, the wind fell light, accompanied with haze. We therefore shaped our course for the night. On the following day we sailed along the west side of Charles Island, with light winds and drizzling rain. The land was gloomy in the extreme. Black lava cliffs bounded the shore, and wherever a glimpse of the interior was caught, tangled underwood and prickly pear were seen. We passed Blackbeach Bay, which offers good anchorage, and the path leading to the settlement is pointed out by a boat-shed in a small sandy bay. A remarkable hill, which the look-out men reported as Saddle Hill, lies about five miles to the southward of this bay,

and is an excellent land-mark. A rock making like a sail clears up any doubt one might have as to the place. Rounding the west extremity of Post-office Bay, a heavy surf breaks on the eastern point, which is still further marked by a small island covered with cactuses, almost reminding one of the Gunner's Quoin off the north-east end of Mauritius.

The wet season extends here from November to March, but it is said not to be so continuous as on the mainland. Heavy rain continued until January 8th, when a fresh southerly breeze cleared the mist and gave us sunshine once more. At noon we came to an anchor in Post-office Bay, Charles Island. A party pulled round to Blackbeach Bay, to visit the settlement, about four miles from the anchorage in Post-office Bay, which received its name from a custom among the whale-ships of leaving a box with letters in one of the clefts of the rock.

The landing in Blackbeach Bay is easy. On looking about we discovered a path, which we followed. The thickets on each side were so tangled, the cacti so large, and armed with prickles three or four inches in length, that attempting to proceed without first clearing a path would have been impossible, and the labour would have been out of the question for a party like ours without machetes or hatchets. Large locusts were seen in extraordinary numbers. The naturalist, the late Mr. Edmonston, obtained some very fine specimens. As we got inland the country improved; the trees became larger, the soil less rocky, or, to describe it more exactly, the masses of lava became pulverized. After a walk of

less than an hour, the crowing of cocks, the braying of donkeys, and the barking of dogs, announced our approach to the abode of man. A few ruined hovels stood round a level green spot. The houses were small, formed of straight poles placed close together with thatched roofs, but devoid of cleanliness, so easily attained in such a place, a sloping declivity with a brook at the bottom offering every convenience for the comforts and decencies of life. We were soon offered fowls, wood, and potatoes for sale, which however were then not our object. Inquiring for the Governor, we were conducted to a larger house, but more dirty and in worse repair even than the rest, where we found three or four good-looking women, swinging in their hammocks, and not at all interrupted by our entrance, and a Señor Alcé, styling himself temporary governor, and acting for Don Jose Villamil, the person mentioned by Captain Fitzroy as the proprietor of the greater part of the stock then (1835) upon the island. An Englishman named Gurney, who had married a sister of Señor Alcé, gave us a variety of information. Captain Fitzroy mentions a penal settlement having been in 1832 established in the island by the Republic of Ecuador. It was chiefly intended for political offenders. About a year before our visit a revolution took place, and the greater number of the exiles were recalled by the party who attained power. There never appears to have been much control exercised over these delinquents, for the most sufficient of all reasons, because the governor had no power to enforce any. At the time of our visit the exiles were certainly not those from whom a government could feel

much fear, consisting of an incorrigible drunkard, an unfortunate mad woman, and a murderer; they were all at large.

The cattle had increased wonderfully, and were estimated at 2000 head, besides wild pigs, goats, and dogs. The cattle are hunted down with dogs, and we were offered any quantity we required, on giving previous notice. The wild dogs keep the goats and pigs down very much. At Juan Fernandez it is stated they have extirpated them, and the same result will take place in this island unless means are adopted to reduce the number of the dogs. There were only two or three tame cows; the difficulty of taming the wild cattle is so great as to be almost impracticable. The people are accustomed to send them to Chatham Island, where an establishment to supply whalers with refreshments is forming. Water is abundant here; at present however no pains are taken to render it available for shipping; this might be done by laying pipes down from the wells to a reservoir formed in Blackbeach Bay. As it is, the gullies and little valleys in Post-office Bay are, in the rainy season, torrents; so that if encouragement were offered by a sufficient demand, a supply might be obtained from this source alone.

We continued our walk to the plantations on the side of a conical hill further inland, or to the eastward of the Puebla, and soon got sight of Post-office Bay, where the Herald and Pandora were riding at anchor. The bay appears equally near with Blackbeach Bay, and the anchorage is more protected. When the settlement was established, the labour of forming the road to Post-office

Bay would not have been greater than to Blackbeach Bay; landing, however, as far as our experience goes, is easier in the latter than in the former. The plantations are in the valley and on the side of the conical mountain, which is plainly seen from Post-office Bay, and serves to point out the settlement from the west side of the island. The fertility of this vale seems unbounded. For a mile we walked through enclosures in which Indian corn, melons, bananas, pumpkins, sugar-cane, and limes were growing most luxuriantly. The largest tree we saw was the Palo santo, which, on being scored, exudes a gum found useful in healing sores and wounds; it grows as large as a pear-tree, but resembles an ash in appearance. There is another and smaller tree, the gum of which is employed for similar purposes. The Palm Cactus (*Opuntia Galapageia*, Hensl.) is remarkable, resembling the cactus engrafted upon the palm, with large oval compressed articulations springing from a cylindrical stem.

After rain the atmosphere was so clear that Indefatigable, or Porter's Isle as the Americans call it, Albemarle, and Barringtons, though they were at least forty or fifty miles distant, could all be defined. The peaks of Albemarle Island are 3700 feet high. The absence of the palm, that attribute of tropical scenery, is remarkable. The palm is a never-failing indication of water, and often of the abode of man; but notwithstanding its absence, we found the island more fertile and wooded than, from Darwin's description, we were led to expect. Since Dampier's visit the progress appears to have been great. We cannot doubt the

truth of that navigator's description, and were agreeably surprised at all we saw. No turpin, or terrapin, are living on this island; but turtle are abundant. Seals frequent the coast in considerable quantities; ten or twelve were shot during our stay, but none of the fur kind. The Pandora got a haul of fish with the seine that few had seen equalled.

On the 11th of January we made sail, standing east-north-east round the north point of Charles Island; the current was strong against us, and with a two-knot breeze we could hardly stem it. At ten A.M. we observed M'Gowan's reef—the water breaking upon it, but not heavily. The position of this reef is  $1^{\circ} 8' 45''$  south and  $89^{\circ} 50'$  west, lying midway between Charles and Chatham Islands. The similarity of these islands is great,—a tame rounded outline, with peaks or extinct craters throughout; the more minute features often reminding one of Etna and the environs of Catania. At three P.M. Dalrymple and Kicker rocks were in sight. The first is sixty-five feet high, and resembles a ship under sail—if that favourite comparison of navigators may be used once more;—its summit is covered with masses looking like ill-made chimney-pots—one of the freaks every now and then occurring, as if to remind one how much beauty and symmetry there is in nature; so much indeed that until the contrary is seen we pass it by unheeded. The Kicker is still more remarkable.

A schooner was seen in Wreck Bay, Chatham Isle. At first it was reported as a flag flying among the trees; then a vessel lying inside a bar harbour, with a heavy surf breaking right across; but as we drew to the north-

east, and the bay opened more clearly, we were able to distinguish the schooner, under Ecuador colours, lying at anchor off a small village close to the beach, with little or no surf at the landing-place. We ran past, however, and came to an anchor in an open bay on the north side of Chatham Island.

On the 12th of January we landed on a sandy beach to take sights for time. The surf was inconvenient, and in the afternoon increased so much that we experienced some difficulty in getting off. The rollers were heavy off the extreme point of St. Stephen's Bay, as much as eight or ten feet high. This would appear to resemble the rollers at St. Helena and Ascension, occurring without apparent cause; for there was, and had been, little wind, and it was besides the lee side of the island. Captain Kellett went round in the Pandora to Freshwater Bay, where the Beagle watered in 1835. He landed without much inconvenience, there being little surf, notwithstanding its being the weather side of the island. Ships well provided with anchors and cables may lie there and water without difficulty or danger; but we were told that at Charles Island a whale-ship, rather than anchor, had purchased water from the settlement, and carried it to the beach on donkeys.

On the 13th we went to examine St. Stephen's Bay, but found landing impossible, on account of the surf. There is deep water and good anchorage, ten and twelve fathoms, within half a mile of the shore; but according to Captain Fitzroy it is subject to calms and baffling winds. During the few hours we were in it, we found this peculiarly the case. The Kicker off this bay is one of the

most extraordinary rocks in the world, and might have been called the Sea-horse, having much the appearance of that animal when lying down with head erect and fore feet a little advanced. It is 400 feet high, and in two distinct parts. A jolly boat could be pulled through if the water was tolerably smooth. It has one or two arches in the larger part, through which the sea rushes with violence. We could get no bottom with fifty fathoms all round it. Finger Point has a heavy surf beating upon it. Captain Fitzroy gives its height as 516 feet: it is almost as remarkable as La Pouce at the Mauritius. St. Stephen's Bay, though it looks well upon the chart, would appear to offer no inducement to a ship, as far as landing goes. The bay we anchored in is better, and that was bad enough; our boats were half-swamped more than once. Wreck Bay, where the settlement, a few poor huts, is formed, is a good snug anchorage, with easy landing. The purser procured wood cheap, but not good. There, for the first time, we saw the terrapin, or galapago, those animals which have given their name to the group. We bought them at the rate of six shillings a-piece; they were two feet two inches in length, one foot ten inches broad, standing one foot two inches off the ground.

On the 14th we sailed for James Island, standing to the north-west. The nights had been beautiful for the last week. The stars were seldom more brilliant. Jupiter shed new lustre upon Aries; Venus and Mars seemed to light up Aquarius and Pisces; Orion, Sirius, Procyon, shining unrivalled; Auriga, Aldebaran, and Gemini were seen on the northern meridian,  $\eta$  in Argo Navis on the



southern,—a glorious galaxy, helping to pass away an hour of the tedious night-watches. On the 15th, at daylight, we were off James Island, but to leeward of the north-west point, round which we had to go. The wind baffled us for a few hours, but afterwards came fresh from south-south-east, and at eleven A.M. we anchored in James's Bay, on the west side of the island. The Guayaquilenians call Charles Island Floriana; the Spaniards used to term it Santa Maria del Aguada. These islands were named after the chief people in England, when buccancering was at its height. Charles and James after the royal brothers, Albemarle after Monk, and Narborough after the admiral. James Island appears covered with larger timber than either of the others we visited, and seas of lava, cliffs, pinnacles, and craters are more numerous. The sportsmen shot a few teal, snipe, curlew, and hawks.

It rained heavily during the night, but cleared up in the morning. Sights for latitude and time were obtained; giving lat.  $0^{\circ} 12' 20''$  north, long.  $90^{\circ} 55' 30''$  west. The place of observation was a sandy beach to the left of the sea of lava. Dampier was at these islands in June, when rain never falls,—we in the middle of the rainy season; which probably accounts for his depreciating account of the group. It is not likely either that he ever went so far inland as the present settlers have done.

On the 16th of January we departed from the Galapagos Islands, and stood across for the mainland—a trip often made by the enterprising buccaneers\*.

\* On the 20th of January, at 9h. 40m. to 10h. 30m. A.M., in lat.

On the 22nd we were off Cape San Francisco, standing round Galera Point. "The country inland," says Dampier, "is high and mountainous, and appears to be woody; by the sea it is full of small points, making as many little sandy bays between them. It is of indifferent height, covered with trees, so that sailing by this coast you see nothing but a vast grove or wood, which is so much the more pleasant because the trees are of several forms, both in respect of their growth and colour." Reading this account with the coast within three or four miles, one cannot do more than repeat it, and acknowledge its fidelity and truth. Point Galera is low and shelving; Cape San Francisco steep and well wooded, the cliffs in many parts are white, somewhat resembling those of Sussex and Kent.

About 2 P.M. we anchored off the river Sua in the bay of Atacamas. Very good anchorage is found in this bay, and as it seldom or never blows, vessels can anchor almost anywhere; but off Sua especially, the water is not deep,  $0^{\circ} 18'$  south and long.  $83^{\circ}$  west, we sounded with 500 fathoms of line, and found the temperature as follows:—

Surface	.....	76°
10 fathoms	.....	75
20	„	70
30	„	67
40	„	67
50	„	65·5
100	„	62·5
200	„	54
300	„	51
400	„	48
500	„	47

On the 21st of January, in lat.  $0^{\circ} 15'$  north and  $81^{\circ} 30'$  west, we tried for soundings with 700 fathoms, but got no bottom.

and the holding-ground good, besides having the advantage of a village within a mile or two, whence supplies can be procured\*.

“On the 24th a party was going wooding, and several of us,” says one of the journals, “took advantage of the boat to get on shore. A pull of about two miles brought us to the mouth of the river, which empties itself into a beautiful little bay. The right-hand side of the bay is formed of high white cliffs, which are crowned with trees, and terminated in one, isolated by a sandy isthmus, called Sua Head. The left side is a sandy beach, interspersed with rocky points, by which, at ebb tide, Atacamas might be reached. On landing, we separated into two parties,—the one intending to reach Atacamas by the beach, the other by the forest. The party to which I belonged struck into a path said to lead to the village. The excursion being my first in a tropical forest, I was both pleased and surprised: a perfume pervaded the air; a continued buzz was kept up by the insects; beautiful birds and butterflies were seen in every direction. A walk of about two miles brought us to a house built upon piles, raised ten or twelve feet from the ground, and thatched with palm-leaves. The inhabitants were civil, and gave us some pine-apples,—a great treat after the walk.

“After leaving the house, and walking about five miles without reaching the village, all became conscious that

\* Marks of the anchorage:—Sua Point just clear of Aguada Head; the latter should not shut in the former, as from the shallowness of the water the swell is often inconvenient. In six fathoms. Mouth of Sua River, south angle from Aguada Head, 40°. Extremes of land, west-south-west and north-east-by-east. Off shore two miles and a half.

we had lost our way. Hearing the barking of dogs, we proceeded towards the direction whence the sounds came. The path brought us to a thicket, but to no inhabited place; and after trying several others with no better success, we determined to return. But lo! the original path was lost; we were bewildered. Here one of the party, requiring a stimulant, found that he had lost his pocket-flask,—a vessel which always accompanied him on his excursions.

“At last the rush of the river was heard; and knowing that by keeping along the banks we should reach the beach, we contrived, not without a good scratching from the underwood, to get to the river. We found a small house, and, as the owner was absent, amused ourselves by examining his household goods,—his calabashes, trunks, bows and arrows. We also fell into a path which led to the first building passed, and, though disappointed at not finding the village, we were glad to find our way. Having rested, and filled our pockets with limes, we made towards the beach, and were joined by Mr. T. Edmonston, the naturalist, who had been botanizing.

“At the sea-shore we met the first party, who, though having reached Atacamas, were half-drowned on their way. One of them had been in a dangerous situation, from which he was only rescued with the loss of his shoes, jacket, and cap; and to finish all, on arriving at the village he had his gun stolen. Returning by the wood, a stream was met with. An ardent conchologist belonging to the party had collected in a handkerchief a few shells. Crossing the river with it in his mouth, his foot

struck against a hard substance. He took it to be an alligator, though some evil-disposed people declared it to be merely a sunken log. Be this as it may, the thing so frightened him that he opened his mouth and lost the collection. In fine, there was hardly one that did not meet with some misfortune. This of course afforded a great deal of amusement, the one laughing at the others' expense. But the comedy was over, a tragedy was about to begin.

“It was getting late ; we were tired and heartily glad to go on board. The surf ran high, but being pretty damp it did not give us any concern. Several were already in the boat, and I was getting in, with the naturalist close behind me, when the leg of my trowsers lifted the cock of a rifle. The piece went off, sending its charge through the arm of Mr. Whiffin, and making a perfect furrow through the skull of the unfortunate Edmonston. He uttered a slight exclamation, and fell into the water. A man immediately raised him to the surface, but life was gone. So suddenly had the accident taken place, that nobody in the boat knew what had happened, Mr. Whiffin not even being aware of his wound. When the melancholy news became known on shore, every one, by tacit consent, discharged his gun, and each report operated upon me like an electric shock ; I almost fancied I beheld another death.

“The boat sent for wood was also in a perilous position. Being heavily laden, the rollers seemed to threaten her destruction as she passed the bar. The captain, in his gig, kept close to her, and every one felt relieved on seeing her safe in deep water. The night was in

keeping with the day ; it rained only as it does in tropical countries, accompanied by thunder, lightning, and heavy gusts, alternating with dreadful calms. The next day we buried the body of our unfortunate shipmate. His remains were laid on a beautiful bank leading to the sandy isthmus of which I have spoken. His loss was felt by all, he being universally beloved for his kind disposition and agreeable manners ; while his talents rendered him a most useful and important acquisition to the duty the ship was employed upon. The shock that the sad news produced was awful ; every one seemed to feel it as a personally afflicting calamity.”

Thomas Edmonston was the eldest son of Dr. Laurence Edmonston, of the Shetland Islands, and was born on the 20th of September, 1825, at the seat of his uncle at Bunness. He was a very delicate child, and the utmost care was necessary to restrain his brain from work until his constitution had become strong. He had hardly completed his fourth year, when, to the surprise of his parents, he taught himself to read in a most peculiar manner. Having an extraordinarily quick and retentive memory, he asked whomsoever he could get to read to him. Two or three readings were sufficient to impress the matter on his mind, and then he learnt the words from the book, thus avoiding all spelling out of syllables. When four years old he began to show a predilection for natural history, especially ornithology. No doubt his father's taste for these studies tended to lead him towards them. So great was the boy's faculty of observation, that if a bird was placed before him he could find out its name by referring to Bewick's 'British Birds,' and

this was at a time when he could not yet speak plainly. He was never satisfied until he knew the scientific appellation of every animal he met with, and this desire led him early to the study of Latin and subsequently to Greek. He was eight years old when he began to pay attention to plants. At the age of twelve he met with Mr. James M'Nab, who was on a tour in Shetland, and to whom he showed the *Arenaria Norvegica*, his first addition to the British Flora. Mr. M'Nab encouraged him, and from that time the pursuit of botany became his ruling passion. When fourteen, he made an excursion over the Shetland Islands, gathering materials, afterwards of course augmented, for his Flora of Shetland, published in 1845. His education had been conducted at home by his father until 1841, when he was sent to the college at Edinburgh, where he attended natural philosophy, languages, and Dr. Graham's Botany. In 1843 he delivered a course of lectures on his favourite science in Lerwick, and in the following year in Elgin and Forres. The winter of 1843-44 he spent at Aberdeen, under Dr. Macgillivray's instruction, and discovered a new species of mollusca now bearing his name. In the spring he became a candidate for the professorship of Natural History, in the Andersonian University, Glasgow, and gained the election by a large majority. He had just prepared his lectures and settled in Glasgow when the appointment as naturalist of H.M.S. Herald was offered to him. His ardent wish was now fulfilled; and looking forward to a situation most congenial to his taste and feelings, he joined the vessel without having even had time to wish his family farewell.

If his friends and relations weep for one of whom they might be justly proud, science has no less reason to regret the loss of so enthusiastic a student. Had his life been spared he would no doubt have become one of the first botanists of the day. He had already, young as he was, published a Flora of the extreme north of the British Islands, and contributed many able articles to Newman's 'Phytologist,' and other scientific periodicals. The piece of oak which was placed at the head of his grave will in future be searched for in vain; but his brother naturalists will meet on the shores of the ocean on which their talented colleague died, an evergreen shrub with dark red panicles. It is the *Edmonstonia pacifica* (Seem.)\*, a monument erected to his memory by an ardent admirer of his talents.

Our station in the bay was on account of the groundswell so inconvenient, that we shifted our berth a mile further off shore, where we rode much easier; and on the 26th of January, before daylight, we were again under way, standing for the Esmeraldas river, a few miles to the northward; but the wind failed and we had to anchor at sunset off Point Gordo. Gordo is a common appellation on this coast, being usually applied to a bluff rounding point, such as this one is. The point should not be hugged too closely; there is a shallow patch off it four or five miles to the westward, having in many parts not more than four and four and a half fathoms; it extends from the town or river of Atacamas

\* This plant has been figured in plate xviii. of the Botany of the Voyage of H.M.S. Herald, and is so different from all known genera that it will probably become the type of a new Natural Order.



on the south, up to Point Gordo, and the shallow water goes four or five miles off the coast, so that, until accurately sounded, it would be prudent to keep thus much off the land.

Among the products of these regions there is the India-rubber tree, a straight tree, growing to the height of sixty feet, at the upper part sending off numerous branches covered with rough bark. The natives make boats of the elastic resin, and a kind of cloth similar in its uses to oil-cloth and to Mackintosh's famous article; they also make it into torches, which emit a pure and brilliant light.

On the 27th of January, before daylight, we got under way, the weather being gloomy and threatening rain, and in the forenoon anchored off the Esmeraldas river. The river has a course of 350 miles and upwards. Rising in the neighbourhood of the volcano of Cotopaxi, and passing through the elevated region of Ecuador, it increases by a number of tributaries, and becomes, next to Guayaquil, the largest river on this coast; for commercial purposes it will never be of great avail, except for the smallest class of vessels. It is extraordinarily rapid: although we were lying three miles from the mouth, in ten fathoms water, yet the sea was much discoloured, and our boats had considerable difficulty in pulling against the current. The town of Esmeraldas, a poor and ill-built place, has about 1000 inhabitants, and is situated on the left bank, about ten miles from the mouth of the river. The prosperity of Guayaquil has been rendered so high by its commerce as to cause jealousy in the capital, and the Government of Ecuador has therefore

endeavoured to make Esmeraldas a port ; but Esmeraldas is far from possessing the advantages of Guayaquil, either as to magnitude or external communication. Cocoa, sugar, various sorts of wood, large bamboos, used much in building, and a species of *Quina*, are exported. There is little direct trade with these productions ; they are mostly transported on the balsas and in small coasters to Guayaquil.

On the 28th of January we weighed and stood to the northward. Heavy rains and light variable winds continued throughout the night. On the following day we were off Gallo Island, which almost adjoins the main, and is famous as being the place where Bartholomew Ruiz, the hardy and experienced pilot of Pizarro's fleet, first anchored ; and where Pizarro himself spent part of that dreadful season when Almagro returned to Panama to obtain reinforcements. Even now, with some acquaintance with the geography of the country, we are amazed at the exploits of that hardy band in persevering in their attempt to discover and conquer Peru. The entangled roots of the mangroves, the vast swamps, pathless forests, high mountains, want of wholesome or sufficient food, are obstacles which would have deterred almost any man. But the Spaniards seem to have been endued with almost superhuman powers ; the lust of gold and the fire of fanaticism appear to have animated them with zeal, energy, and powers of endurance, which, though the relation of their deeds make us shudder with abhorrence and indignation, must ever command admiration.