



734/c

George Stone



George Stone!

AN
ACCOUNT
OF THE
VOYAGES

UNDERTAKEN BY THE
ORDER OF HIS PRESENT MAJESTY
FOR MAKING

Discoveries in the Southern Hemisphere,

And successively performed by

COMMODORE BYRON, || CAPTAIN CARTERET,
CAPTAIN WALLIS, || And CAPTAIN COOK,

In the DOLPHIN, the SWALLOW, and the ENDEAVOUR:

DRAWN UP

From the JOURNALS which were kept by the several COMMANDERS;
And from the Papers of JOSEPH BANKS, Esq;

By JOHN HAWKESWORTH, LL.D.

IN THREE VOLUMES.

Illustrated with CUTS, and a great Variety of CHARTS and MAPS relative to
Countries now first discovered, or hitherto but imperfectly known.

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B O O K II.

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Range from Cape Turnagain southward along the eastern Coast of Poenammoo, round Cape South, and back to the western Entrance of Cook's Streight, which completed the Circumnavigation of this Country; with a Description of the Coast, and of Admiralty Bay: The Departure from New Zealand, and various Particulars.

AT four o'clock in the afternoon of Friday the 9th of February, having tacked, we stood S. W. and continued to make sail to the southward till sunset on the 11th, when a fresh breeze at N. E. had carried us back again the length of Cape Palliser, of which as the weather was clear we had a good view. Between the foot of the high land and the sea there is a low flat border, off which there are some rocks that appear above water. Between this Cape and Cape Turnagain, the land near the shore is, in many places, low and flat, and has a green and pleasant appearance; but farther from the sea it rises into hills. The land between

1770.
February.
Friday 9.
Sunday 11.

Cape:

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February.
Sunday 11.

Cape Pallifer and Cape Tierawitte is high and makes in table-points; it also seemed to us to form two bays, but we were at too great a distance from this part of the coast, to judge accurately from appearances. The wind having been variable, with calms, we had advanced no farther by the 12th at noon than latitude $41^{\circ} 52'$, Cape Pallifer then bearing north, distant about five leagues; and the snowy mountain S. 83° W.

Monday 12.

Tuesday 13.

At noon on the 13th, we found ourselves in the latitude of $42^{\circ} 2'$ S.; Cape Pallifer bearing N. 20° E. distant eight leagues. In the afternoon, a fresh gale sprung up at N. E. and we steered S. W. by W. for the southermost land in sight, which at sunset bore from us S. 74° W. At this time the variation was $15^{\circ} 4'$ E.

Wednes. 14.

At eight o'clock in the morning of the 14th, having run one and twenty leagues S. 58° W. since the preceding noon, it fell calm. We were then abreast of the snowy mountain which bore from us N. W. and in this direction lay behind a mountainous ridge of nearly the same height, which rises directly from the sea, and runs parallel with the shore, which lies N. E. $\frac{1}{2}$ N. and S. W. $\frac{1}{2}$ S. The north west end of the ridge rises inland, not far from Cape Campbell; and both the mountain and the ridge are distinctly seen as well from Cape Koamaroo as Cape Pallifer: from Koamaroo they are distant two and twenty leagues S. W. $\frac{1}{2}$ S.; and from Cape Pallifer thirty leagues W. S. W.; and are of a height sufficient to be seen at a much greater distance. At noon this day, we were in latitude $42^{\circ} 34'$ S. The southermost land in sight bore S. W. $\frac{1}{2}$ W.; and some low land that appeared like an island, and lay close under the foot of the ridge, bore N. W. by N. about five or six leagues.

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February.
Wednes. 14.

In the afternoon, when Mr. Banks was out in the boat a shooting, we saw, with our glasses, four double canoes, having on board fifty-seven men, put off from that shore, and make towards him: we immediately made signals for him to come on board; but the ship, with respect to him, being right in the wake of the sun, he did not see them. We were at a considerable distance from the shore, and he was at a considerable distance from the ship, which was between him and the shore; so that, it being a dead calm, I began to be in some pain for him, fearing that he might not see the canoes time enough to reach the ship before they should get up with him: soon after, however, we saw his boat in motion, and had the pleasure to take him on board before the Indians came up, who probably had not seen him, as their attention seemed to be wholly fixed upon the ship. They came within about a stone's cast, and then stopped, gazing at us with a look of vacant astonishment: Tupia exerted all his eloquence to prevail upon them to come nearer, but without any effect. After surveying us for some time, they left us, and made towards the shore; but had not measured more than half the distance between that and the ship before it was dark. We imagined that these people had heard nothing of us, and could not but remark the different behaviour and dispositions of the inhabitants of the different parts of this coast upon their first approaching the vessel. These kept aloof with a mixture of timidity and wonder; others had immediately commenced hostilities, by pelting us with stones: the gentleman whom we had found alone, fishing in his boat, seemed to think us entirely unworthy of his notice; and some, almost without invitation, had come on board with an air of perfect confidence and good-will. From the behaviour of our last visitors, I gave the land from which they had put

1770.
February.
Wednes. 14.

off, and which, as I have before observed, had the appearance of an island, the name of LOOKERS-ON.

Thursday 15.

At eight o'clock in the evening, a breeze sprung up at S.S.W. with which I stretched off south east, because some on board thought they saw land in that quarter. In this course we continued till six o'clock the next morning, when we had run eleven leagues, but saw no land, except that which we had left. Having stood to the S.E. with a light breeze, which veered from the west to the north, till noon, our latitude by observation was $42^{\circ} 56'$ S. and the high land that we were abreast of the preceding noon bore N.N.W. $\frac{1}{2}$ W. In the afternoon we had a light breeze at N.E. with which we steered west, edging in for the land, which was distant about eight leagues. At seven in the evening, we were about six leagues from the shore, and the southernmost extremity of the land in sight bore W.S.W.

Friday 16.

At day-break on the 16th, we discovered land bearing S. by W. and seemingly detached from the coast we were upon. About eight, a breeze sprung up, at N. by E. and we steered directly for it. At noon, we were in latitude $43^{\circ} 19'$ S. the peak on the snowy mountain bore N. 20 E. distant twenty-seven leagues; the southern extremity of the land we could see bore west, and the land which had been discovered in the morning appeared like an island extending from S.S.W. to S.W. by W. $\frac{1}{2}$ W. distant about eight leagues. In the afternoon, we stood to the southward of it, with a fresh breeze at north: at eight in the evening, we had run eleven leagues, and the land then extended from S.W. by W. to N. by W. We were then distant about three or four leagues from the nearest shore, and in this situation had fifty fathom water, with a fine sandy bottom. The variation of the compass by this morning's amplitude was $14^{\circ} 39'$ E.

At

At sun-rise, the next morning, our opinion that the land we had been standing for was an island, was confirmed, by our seeing part of the land of Tovy Poenammoo open to the westward of it, extending as far as W. by S. At eight in the morning, the extremes of the island bore N. 76 W. and N.N.E. $\frac{1}{2}$ E.; and an opening near the south point, which had the appearance of a bay or harbour, N. 20 W. distant between three and four leagues: in this situation we had thirty-eight fathom water with a brown sandy bottom.

1770.
February.
Saturday 17.

This island, which I named after Mr. Banks, lies about five leagues from the coast of Tovy Poenammoo; the south point bears S. 21 W. from the highest peak on the snowy mountain, and lies in latitude $43^{\circ} 32'$ S. and in longitude $186^{\circ} 30'$ W. by an observation of the sun and moon which was made this morning: it is of a circular figure, and about twenty-four leagues in compass: it is sufficiently high to be seen at the distance of twelve or fifteen leagues, and the land has a broken irregular surface, with the appearance rather of barrenness than fertility; yet it was inhabited, for we saw smoke in one place, and a few straggling natives in another.

Banks's
Island.

When this island was first discovered in the direction of S. by W. some persons on board were of opinion that they also saw land bearing S.S.E. and S.E. by E. I was myself upon the deck at the time, and told them, that in my opinion it was no more than a cloud, and that as the sun rose it would dissipate and vanish. However, as I was determined to leave no subject for disputation which experiment could remove, I ordered the ship to be wore, and steered E.S.E. by compass, in the direction which the land was said to bear from us at that time. At noon we were in latitude $44^{\circ} 7'$ S.; the south point of Banks's Island bearing north, distant five leagues.

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February.
Saturday 17. leagues. By seven o'clock at night we had run eight and twenty miles, when seeing no land, nor any signs of any, but that which we had left, we bore away S. by W. and continued upon that course till the next day at noon, when we were in latitude $45^{\circ} 16'$, the south point of Banks's Island bearing N. $6^{\circ} 30'$ W. distant twenty-eight leagues. The variation by the azimuth this morning was $15^{\circ} 30'$ E. As no signs of land had yet appeared to the southward, and as I thought that we had stood far enough in that direction to weather all the land we had left, judging from the report of the natives in Queen Charlotte's Sound, I hauled to the westward.

Monday 19. We had a moderate breeze at N. N. W. and N. till eight in the evening, when it became unsettled; and at ten fixed at south: during the night, it blew with such violence that it brought us under our close reefed topsails. At eight the next morning, having run twenty-eight leagues upon a W. by N. $\frac{1}{2}$ N. course, and judging ourselves to be to the westward of the land of Tovy Poenammoo, we bore away N. W. with a fresh gale at south. At ten, having run eleven miles upon this course, we saw land extending from the S. W. to the N. W. at the distance of about ten leagues, which we hauled up for. At noon, our latitude by observation was $44^{\circ} 38'$, the south east point of Bank's Island bore N. $58^{\circ} 30'$ E. distant thirty leagues, and the main body of the land in sight W. by N. A head sea prevented us from making much way to the southward; at seven in the evening the extremes of the land stretched from S. W. by S. to N. by W.; and at six leagues from the shore we had thirty-two fathom water. At four o'clock the next morning, we stood in for the shore W. by S. and during a course of four leagues, our depth of water was from thirty-two to thirteen fathom.

Tuesday 20.

When it was thirteen fathom we were but three miles distant from the shore, and therefore stood off; its direction is here nearly N. and S. The surface, to the distance of about five miles from the sea, is low and flat; but it then rises into hills of a considerable height. It appeared to be totally barren, and we saw no signs of its being inhabited. Our latitude, at noon, was $44^{\circ} 44'$; and the longitude which we made from Banks's Island to this place was $2^{\circ} 22' W.$ During the last twenty-four hours, though we carried as much sail as the ship would bear, we were driven three leagues to the leeward.

1770.
February.
Tuesday 20.

We continued to stand off and on all this day and the next, keeping at the distance of between four and twelve leagues from the shore, and having water from thirty-five to fifty-three fathom. On the 22d, at noon, we had no observation, but by the land judged ourselves to be about three leagues farther north than we had been the day before. At sun-set, the weather, which had been hazey, clearing up, we saw a mountain which rose in a high peak, bearing N.W. by N.; and at the same time, we saw the land more distinctly than before, extending from N. to S.W. by S. which, at some distance within the coast, had a lofty and mountainous appearance. We soon found that the accounts which had been given us by the Indians in Queen Charlotte's Sound of the land to the southward were not true; for they had told us that it might be circumnavigated in four days.

Wednes. 21.

Thursday 22.

On the 23d, having a hollow swell from the S.E. and expecting wind from the same quarter, we kept plying between seven and fifteen leagues from the shore, having from seventy to forty-four fathom. At noon, our latitude by observation was $44^{\circ} 40' S.$ and our longitude from Banks's island $1^{\circ} 31' W.$ From this time to six in the evening it was

Friday 23.

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February.
Friday 23.

calm; but a light breeze then springing up at E.N.E. we steered S. S. E. all night, edging off from the land, the hollow swell still continuing; our depth of water was from sixty to seventy-five fathom. While we were becalmed, Mr. Banks, being out in the boat, shot two Port Egmont hens, which were in every respect the same as those that are found in great numbers upon the island of Faro, and were the first of the kind we had seen upon this coast, though we fell in with some a few days before we made land.

Saturday 24.

At day-break, the wind freshened, and before noon we had a strong gale at N.N.E. At eight in the morning we saw the land extending as far as S.W. by S. and steered directly for it. At noon, we were in latitude $45^{\circ} 22' S.$; and the land, which now stretched from S.W. $\frac{1}{2}$ S. to N.N.W. appeared to be rudely diversified by hill and valley. In the afternoon, we steered S.W. by S. and S.W. edging in for the land with a fresh gale at north; but though we were at no great distance, the weather was so hazey that we could see nothing distinctly upon it, except a ridge of high hills lying not far from the sea, and parallel to the coast, which in this place stretches S. by W. and N. by E. and seemed to end in a high bluff point to the southward. By eight in the evening we were abreast of this point; but it being then dark, and I not knowing which way the land trended, we brought to for the night. At this time, the point bore west, and was distant about five miles: our depth of water was thirty-seven fathom, and the bottom consisted of small pebbles.

Sunday 25.

At day-break, having made sail, the point bore north, distant three leagues, and we now found that the land trended from it S.W. by W. as far as we could see. This point I named CAPE SAUNDERS, in honour of Sir Charles. Our latitude was $45^{\circ} 35' S.$ and longitude $189^{\circ} 4' W.$ By the latitude, and the angles

angles that are made by the coast, this point will be sufficiently known; there is, however, about three or four leagues to the south west of it, and very near the shore, a remarkable saddle-hill, which is a good direction to it on that quarter. From one league to four leagues north of Cape Saunders, the shore forms two or three bays, in which there appeared to be good anchorage, and effectual shelter from the S. W. westerly, and N. westerly winds; but my desire of getting to the southward, in order to ascertain whether this country was an island or a continent, prevented my putting into any of them.

1770.
February:
Sunday 25.

We kept at a small distance from the shore all this morning, with the wind at S. W. and had a very distinct view of it: it is of a moderate height, and the surface is broken by many hills, which are green and woody; but we saw no appearance of inhabitants. At noon, Cape Saunders bore N. 30 W. distant about four leagues. We had variable winds and calms till five o'clock in the evening, when it fixed at W. S. W. and soon blew so hard that it put us past our topsails, and split the foresail all to pieces: after getting another to the yard, we continued to stand to the southward under two courses; and at six the next morning, the southermost land in sight bore W. by N. and Cape Saunders N. by W. distant eight leagues: at noon, it bore N. 20 W. fourteen leagues; and our latitude by observation was $46^{\circ} 36'$. The gale continued, with heavy squalls and a large hollow sea all the afternoon; and at seven in the evening, we lay to under our foresail, with the ship's head to the southward: at noon on the 27th, our latitude was $46^{\circ} 54'$, and our longitude from Cape Saunders $1^{\circ} 24'$ E. At seven in the evening, we made sail under our courses; and at eight the next morning set the topsails close reefed. At noon, our latitude was $47^{\circ} 43'$, and our longitude east from Cape Saunders $2^{\circ} 10'$. At this time, we wore

Monday 26.

Tuesday 27.

Wednes. 28.

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February.
Wednesf. 28.

and flood to the northward: in the afternoon, we found the variation to be $16^{\circ} 34'$ E. At eight in the evening, we tacked and flood to the southward, with the wind at west.

March.
Thursday 1.

At noon this day, our latitude by account was $47^{\circ} 52'$, and our longitude from Cape Saunders $1^{\circ} 8'$ E. We flood to the southward till half an hour past three in the afternoon; and then, being in latitude 48° S. and longitude 188° W. and seeing no appearance of land, we tacked and flood to the northward, having a large swell from the S. W. by W. At

Friday 2.

noon the next day, our latitude was $46^{\circ} 42'$ S.; and Cape Saunders bore N. 46° W. distant eighty-six miles. The south

Saturday 3.

west swell continuing till the 3d, confirmed our opinion, that there was no land in that quarter. At four in the afternoon, we flood to the westward with all the sail we could make.

Sunday 4.

In the morning of the 4th, we found the variation to be $16^{\circ} 16'$ E. This day we saw some whales and seals, as we had done several times after our having passed the strait; but we saw no seal while we were upon the coast of Eahienomauwe. We sounded both in the night and this morning, but had no ground with one hundred and fifty fathom. At noon, we saw Cape Saunders bearing N. $\frac{1}{2}$ W.; and our latitude by observation was $46^{\circ} 31'$ S. At half an hour past one o'clock, we saw land bearing W. by S. which we steered for, and before it was dark were within three or four miles of it: during the whole night we saw fires upon it, and at seven in

Monday 5.

the morning were within about three leagues of the shore, which appeared to be high, but level. At three o'clock in the afternoon, we saw the land extending from N. E. by N. to N. W. $\frac{1}{2}$ N.; and soon after we discovered some low land, which appeared like an island, bearing S. $\frac{1}{2}$ W. We continued our course to the W. by S. and in two hours we saw high land over the low land, extending to the southward as far as S. W. by S.; but it did not appear to be joined to the

land to the northward, so that there is either water, a deep bay, or low land between them.

1770.
March.

At noon on the 6th, we were nearly in the same situation as at noon on the day before : in the afternoon we found the variation, by several azimuths and the amplitude, to be $15^{\circ} 10'$ E. On the 7th at noon, we were in latitude $47^{\circ} 6'$ S. and had made twelve miles easting during the last twenty-four hours. We stood to the westward the remainder of this day, and all the next till sun-set, when the extrems of the land bore from N. by E. to W. distant about seven or eight leagues : in this situation our depth of water was fifty-five fathom, and the variation by amplitude $16^{\circ} 29'$ E. The wind now veered from the N. to the W. and as we had fine weather, and moonlight, we kept standing close upon the wind to the S. W. all night. At four in the morning, we had sixty fathom water ; and at day-light, we discovered under our bow a ledge of rocks, extending from S. by W. to W. by S. upon which the sea broke very high : they were not more than three quarters of a mile distant, yet we had five and forty fathom water. As the wind was at N. W. we could not now weather them, and as I was unwilling to run to leeward, I tacked and made a trip to the eastward ; the wind however soon after coming to the northward, enabled us to get clear of all. Our soundings, while we were passing within the ledge, were from thirty-five to forty-seven fathom with a rocky bottom.

Tuesday 6.

Wednes. 7.

Thursday 8.

Friday 9.

This ledge lies S. E. six leagues from the southermost part of the land, and S. E. by E. from some remarkable hills which stand near the shore : about three leagues to the northward of it, there is another ledge, which lies full three leagues from the shore, and on which the sea broke in a dreadful surf. As we passed these rocks to the north in the night,

1770.
March.
Friday 9.

night, and discovered the others under our bow at break of day, it is manifest that our danger was imminent, and our escape critical in the highest degree: from the situation of these rocks, so well adapted to catch unwary strangers, I called them the TRAPS. Our latitude at noon was $47^{\circ} 26' S.$ The land in sight, which had the appearance of an island, extended from N. E. by N. to N. W. by W. and seemed to be about five leagues distant from the main; the eastermost ledge of rocks bore S. S. E. distant one league and an half, and the northermost N. E. $\frac{1}{2}$ E. distant about three leagues. This land is high and barren, with nothing upon it but a few straggling shrubs, for not a single tree was to be seen; it was however remarkable for a number of white patches, which I took to be marble, as they reflected the sun's rays very strongly: other patches of the same kind we had observed in different parts of this country, particularly in Mercury Bay: we continued to stand close upon a wind to the westward, and at sun-set the southermost point of land bore N. 38° E. distant four leagues, and the westermost land in sight bore N. 2° E. The point which lies in latitude $47^{\circ} 19' S.$ longitude $192^{\circ} 12' W.$ I named SOUTH CAPE; the westermost land was a small island, lying off the point of the main.

Supposing South Cape to be the southern extremity of this country, as indeed it proved to be, I hoped to get round it by the west, for a large hollow swell from the south west, ever since our last hard gale, had convinced me that there was no land in that direction.

Saturday 10.

In the night we had a hard gale at N. E. by N. and N. which brought us under our courses, but about eight in the morning it became moderate; and at noon, veering to the west, we tacked and stood to the northward, having no land in sight. Our latitude, by observation, was $47^{\circ} 33' S.$ our longitude,

1770.
March.

Sunday 11.

longitude, west from the South Cape, 59'. We stood away N. N. E. close upon a wind, without seeing any land, till two the next morning, when we discovered an island bearing N. W. by N. distant about five leagues: about two hours afterwards we saw land a-head, upon which we tacked and stood off till six, when we stood in to take a nearer view of it: at eleven we were within three leagues of it, but the wind seeming to incline upon the shore, I tacked and stood off to the southward. We had now sailed round the land which we had discovered on the 5th, and which then did not appear to be joined to the main which lay north of it; and being now come to the other side of what we supposed to be water, a bay, or low land, it had the same appearance, but when I came to lay it down upon paper I saw no reason to suppose it to be an island; on the contrary, I was clearly of opinion that it made part of the main. At noon, the western extremity of the main bore N. 59 W. and the island which we had seen in the morning, S. 59 W. distant about five leagues. It lies in latitude $46^{\circ} 31'$ S. longitude $192^{\circ} 49'$ W. and is nothing but a barren rock about a mile in circuit, remarkably high, and lies full five leagues distant from the main. This island I named after Dr. Solander, and called it SOLANDER'S ISLAND. The shore of the main lies nearest E. by S. and W. by N. and forms a large open bay, in which there is no appearance of any harbour or shelter for shipping against S. W. and southerly winds: the surface of the country is broken into craggy hills, of a great height, on the summits of which are several patches of snow: it is not, however, wholly barren, for we could see wood not only in the vallies, but upon the highest ground, yet we saw no appearance of its being inhabited.

We continued to stand to the S. W. by S. till eleven o'clock the next morning, when the wind shifted to the S. W. by W. upon

Monday 12.

1770.
March.

upon which we wore, and stood to the N. N. W. being then in latitude $47^{\circ} 40'$ S. longitude $193^{\circ} 50'$ W. and having a hollow sea from the S. W.

Tuesday 13.

During the night, we steered N. N. W. till six in the morning, when, seeing no land, we steered N. by E. till eight, when we steered N. E. by E. $\frac{1}{2}$ E. to make the land, which at ten we saw bearing E. N. E. but it being hazy, we could distinguish nothing upon it. At noon, our latitude, by observation, was 46° S. About two it cleared up, and the land appeared to be high, rude, and mountainous: about half an hour after three I hauled in for a bay, in which there appeared to be good anchorage; but in about an hour, finding the distance too great to run before it would be dark, and the wind blowing too hard to make the attempt safe in the night, I bore away along the shore.

This bay, which I called DUSKY BAY, lies in latitude $45^{\circ} 47'$ S.: it is between three and four miles broad at the entrance, and seems to be full as deep as it is broad: it contains several islands, behind which there must be shelter from all winds, though possibly there may not be sufficient depth of water. The north point of this bay, when it bears S. E. by S. is rendered very remarkable by five high peaked rocks which lie off it, and have the appearance of the four fingers and thumb of a man's hand, for which reason I called it POINT FIVE FINGERS: the land of this Point is farther remarkable, for being the only level land within a considerable distance. It extends near two leagues to the northward, is lofty, and covered with wood: the land behind it is very different, consisting wholly of mountains, totally barren and rocky; and this difference gives the Cape the appearance of an island.

At

1770:
March.
Tuesday 13.

At sun-set, the southermost land in sight bore due south, distant about five or six leagues; and as this is the westernmost point of land upon the whole coast, I called it WEST CAPE. It lies about three leagues to the southward of Dusky Bay, in the latitude of $45^{\circ} 54'$ S. and in the longitude of $193^{\circ} 17'$ W. The land of this Cape is of a moderate height next the sea, and has nothing remarkable about it, except a very white cliff, two or three leagues to the southward of it: to the southward of it also the land trends away to the S. E. and to the northward it trends N. N. E.

Wednes. 14.

Having brought to for the night, we made sail along the shore at four in the morning, in the direction of N. E. $\frac{1}{2}$ N. with a moderate breeze at S. S. E. At noon, our latitude, by observation, was $45^{\circ} 13'$ S. At this time, being about a league and an half from the shore, we sounded, but had no ground with seventy fathom: we had just passed a small narrow opening in land, where there seemed to be a very safe and convenient harbour, formed by an island, which lay in the middle of the opening at east. The opening lies in latitude $45^{\circ} 16'$ S. and on the land behind it are mountains, the summits of which were covered with snow, that appeared to have been recently fallen; and indeed for two days past we had found the weather very cold. On each side the entrance of the opening, the land rises almost perpendicularly from the sea to a stupendous height, and this indeed was the reason why I did not carry the ship into it, for no wind could blow there but right in, or right out, in the direction of either east or west, and I thought it by no means advisable to put into a place whence I could not have got out but with a wind which experience had taught me did not blow more than one day in a month. In this, however, I acted contrary to the opinion of some persons on board, who in very

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Wednes. 14.

strong terms expressed their desire to harbour for present convenience, without any regard to future disadvantages.

In the evening, being about two leagues from the shore, we founded, and had no ground with 108 fathom: the variation of the needle, by azimuth, was 14° E. and by amplitude $15^{\circ} 2'$. We made the best of our way along the shore with what wind we had, keeping at the distance of between two and three leagues. At noon, we were in latitude $44^{\circ} 47'$, having run only twelve leagues upon a N. E. $\frac{1}{4}$ N. course, during the last four and twenty hours.

Thursday 15.

We continued to steer along the shore, in the direction of N. E. $\frac{1}{4}$ E. till six o'clock in the evening, when we brought to for the night. At four in the morning, we stood in for the land, and when the day broke we saw what appeared to be an inlet; but upon a nearer approach proved to be only a deep valley between two high lands: we proceeded therefore in the same course, keeping the shore at the distance of between four and five miles. At noon on the 16th, the northermost point of land in sight bore N. 60° E. at the distance of ten miles; and our latitude, by observation, was $44^{\circ} 5'$, our longitude from Cape West $2^{\circ} 8'$ E. About two, we past the point which at noon had been distant ten miles, and found it to consist of high red cliffs, down which there fell a cascade of water in four small streams, and I therefore gave it the name of CASCADE POINT. From this Point the land trends first N. 76° E. and afterwards more to the northward. At the distance of eight leagues from Cascade Point, in the direction of E. N. E. and at a little distance from the shore, lies a small low island, which bore from us S. by E. at the distance of about a league and a half.

Friday 16.

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At seven in the evening, we brought to, in thirty-three fathom with a fine sandy bottom, at ten we had fifty fathom, and at twelve wore in sixty-five fathom, having driven several miles N. N. W. after our having brought to. At two in the morning, we had no ground with 140 fathom, by which it appears that the soundings extend but a little way from the shore. About this time it fell calm; at eight, a breeze sprung up at S. W. with which we steered along the shore, in the direction of N. E. by E. $\frac{1}{2}$ E. at the distance of about three leagues. At six in the evening, being about one league from the shore, we had seventeen fathom; and at eight, being about three leagues from the shore, we had forty-four: we now shortened sail and brought to, having run ten leagues N. E. by E. since noon.

Saturday 17.

It was calm most part of the night; but at ten in the morning a light breeze sprung up at S. W. by W. when we made sail again along the shore, N. E. by N. having a large swell from the W. S. W. which had risen in the night; at noon, our latitude, by observation, was $43^{\circ} 4' S.$ and our longitude from Cape West $4^{\circ} 12' E.$ We observed, that the vallies as well as the mountains were this morning covered with snow, part of which we supposed to have fallen during the night, when we had rain. At six in the evening we shortened sail, and at ten brought to, at the distance of about five leagues from the shore, where we had 115 fathom. At midnight, there being little wind, we made sail, and at eight in the morning we stood to the N. E. close upon a wind till noon, when we tacked, being about three leagues from the land, and, by observation, in latitude $42^{\circ} 8'$, and longitude from Cape West $5^{\circ} 5' E.$

Sunday 18.

Monday 19.

We continued to stand westward till two in the morning, when we made a trip to the eastward, and afterwards stood westward till noon, when, by our reckoning, we were in

Tuesday 20.

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Wednes. 21.

the latitude of $42^{\circ} 23'$, and longitude from Cape West $3^{\circ} 55' E.$ We now tacked and stood eastward, with a fresh gale at N. by W. till six in the evening, when the wind shifted to the S. and S. S. W. with which we steered N. E. by N. till six in the morning, when we hauled in E. by N. to make the land, which we saw soon afterwards; at noon, our latitude, by account, was $41^{\circ} 37'$, and our longitude from Cape West $5^{\circ} 42' E.$ We were now within three or four leagues of the land, but it being foggy, we could see nothing upon it distinctly, and as we had much wind, and a vast swell rolling in upon the shore, from the W. S. W. I did not think it safe to go nearer.

Thursday 22.

In the afternoon, we had a gentle breeze from the S. S. W. with which we steered north along the shore till eight, when, being within between two and three leagues, we sounded, and had but thirty-four fathom; upon which we hauled off N. W. by N. till eleven at night, and then brought to, having sixty-four fathom. At four in the morning, we made sail to the N. E. with a light breeze at S. S. W. which at eight veered to the westward, and soon after died away: at this time we were within three or four miles of the land, and had fifty-four fathom, with a large swell from the W. S. W. rolling obliquely upon the shore, which made me fear that I should be obliged to anchor; but by the help of a light air now and then from the S. W. I was able to keep the ship from driving. At noon, the northermost land in sight bore N. E. by E. $\frac{1}{2} E.$ distant about ten leagues; our latitude, by account, was $40^{\circ} 55' S.$ longitude from Cape West $6^{\circ} 35' E.$ From this time we had light airs from the southward, with intervals of calm, till noon on the 23d, when our latitude, by observation, was $40^{\circ} 36' 30'' S.$ and our longitude from Cape West $6^{\circ} 52' E.$ The eastermost point of land in sight bore E. 10 N. at the distance of seven leagues, and a bluff

Friday 23.

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March.
Friday 23.

head or point, of which we had been abreast at noon the day before, and off which lay some rocks above water, bore S. 18 W. at the distance of six leagues. This point I called Rock's Point. Our latitude was now $40^{\circ} 55'$ S. and having nearly run down the whole of the north west coast of Tovy Poenammoo, I shall give some account of the face of the country.

I have already observed, that on the 11th, when we were off the southern part, the land then seen was craggy and mountainous, and there is great reason to believe that the same ridge of mountains extends nearly the whole length of the island. Between the westernmost land which we saw that day, and the easternmost which we saw on the 13th, there is a space of about six or eight leagues, of which we did not see the coast, though we plainly discovered the mountains inland. The sea coast near Cape West is low, rising with an easy and gradual ascent to the foot of the mountains, and being in most parts covered with wood. From Point Five Fingers, down to latitude $44^{\circ} 20'$ there is a narrow ridge of hills that rises directly from the sea, and is covered with wood: close behind these hills are the mountains, extending in another ridge of a stupendous height, and consisting of rocks that are totally barren and naked, except where they are covered with snow, which is to be seen in large patches upon many parts of them, and has probably lain there ever since the creation of the world: a prospect more rude, craggy, and desolate than this country affords from the sea, cannot possibly be conceived, for as far inland as the eye can reach, nothing appears but the summits of rocks, which stand so near together, that instead of vallies there is only fissures between them. From the latitude of $44^{\circ} 20'$, to the latitude of $42^{\circ} 8'$, these mountains lie farther inland, and
the

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Friday 23.

the sea coast consists of woody hills and vallies, of various height and extent, and has much appearance of fertility: many of the vallies form plains of considerable extent, wholly covered with wood, but it is very probable that the ground, in many places, is swampy and interspersed with pools of water. From latitude $42^{\circ} 8'$, to $41^{\circ} 30'$, the land is not distinguished by any thing remarkable: it rises into hills directly from the sea, and is covered with wood; but the weather being foggy while we were upon this part of the coast, we could see very little inland, except now and then the summits of the mountains, towering above the cloudy mists that obscured them below, which confirmed my opinion that a chain of mountains extended from one end of the island to the other.

In the afternoon, we had a gentle breeze at S. W. which, before it was quite dark, brought us abreast of the eastern point which we had seen at noon; but not knowing what course the land took on the other side of it, we brought to in thirty-four fathom, at the distance of about one league from the shore. At eight in the evening, there being little wind, we filled and stood on till midnight, and then we brought to till four in the morning, when we again made sail, and at break of day we saw low land extending from the point to the S. S. E. as far as the eye could reach, the eastern extremity of which appeared in round hillocks: by this time the gale had veered to the eastward, which obliged us to ply to windward. At noon next day, the eastern point bore S. W. by S. distant sixteen miles, and our latitude was $40^{\circ} 19'$: the wind continuing easterly, we were nearly in the same situation at noon on the day following. About three o'clock the wind came to the westward, and we steered E. S. E. with all the sail we could set till it was dark, and then shortened sail till the morning: as we had thick hazey weather all night, we

Saturday 24.

Sunday 25.

Monday 26.

Tuesday 27.

we kept sounding continually, and had from thirty-seven to forty-two fathom. When the day broke we saw land bearing S. E. by E. and an island lying near it, bearing E. S. E. distant about five leagues: this island I knew to be the same that I had seen from the entrance of Queen Charlotte's Sound, from which it bears N. W. by N. distant nine leagues. At noon, it bore south, distant four or five miles, and the north-west head of the Sound S. E. by S. distant ten leagues and an half. Our latitude, by observation, was $40^{\circ} 33' S$.

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March.
Tuesday 27.

As we had now circumnavigated the whole country, it became necessary to think of quitting it, but as I had thirty tons of empty water casks on board, this could not be done till I had filled them: I therefore hauled round the island, and entered a bay, which lies between that and Queen Charlotte's Sound, leaving three more islands, which lay close under the western shore, between three or four miles within the entrance, on our starboard hand: while we were running in, we kept the lead continually going, and had from forty to twelve fathom. At six o'clock in the evening, we anchored in eleven fathom with a muddy bottom, under the west shore, in the second cove, that lies within the three islands; and as soon as it was light the next morning, I took a boat, and went on shore to look for a watering-place, and a proper birth for the ship, both which I found, much to my satisfaction. As soon as the ship was moored, I sent an officer on shore to superintend the watering, and the carpenter, with his crew, to cut wood, while the long-boat was employed in landing the empty casks.

Wednes. 28.

In this employment we were busy till the 30th, when the wind seeming to settle at S. E. and our water being nearly completed, we warped the ship out of the cove, that we might have room to get under sail: and at noon I went away

Friday 30.

in

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March.

Friday 30.

in the pinnace to examine as much of the bay as my time would admit.

After rowing about two leagues up it, I went ashore upon a point of land on the western side, and having climbed a hill, I saw the western arm of this bay run in S.W. by W. about five leagues farther, yet I could not discover the end of it: there appeared to be several other inlets, or at least small bays, between this and the north west head of Queen Charlotte's Sound, in each of which, I make no doubt, there is anchorage and shelter, as they are all covered from the sea wind by the islands which lie without them. The land about this bay, as far as I could see of it, is of a hilly surface, chiefly covered with trees, shrubs, and fern, which render travelling difficult and fatiguing. In this excursion I was accompanied by Mr. Banks and Dr. Solander, who found several new plants. We met with some huts, which seemed to have been long deserted, but saw no inhabitants. Mr. Banks examined several of the stones that lay upon the beach, which were full of veins, and had a mineral appearance; but he did not discover any thing in them which he knew to be ore: if he had had an opportunity to examine any of the bare rocks, perhaps he might have been more fortunate. He was also of opinion that what I had taken for marble in another place, was a mineral substance; and that, considering the correspondence of latitude between this place and South America, it was not improbable but that, by a proper examination, something very valuable might be found.

At my return in the evening, I found all the wood and water on board, and the ship ready for the sea; I resolved therefore to quit the country, and return home by such a route as might be of most advantage to the service; and
upon

upon this subject took the opinion of my officers. I had myself a strong desire to return by Cape Horn, because that would have enabled me finally to determine, whether there is or is not a southern continent; but against this it was a sufficient objection that we must have kept in a high southern latitude in the very depth of winter, with a vessel which was not thought sufficient for the undertaking: and the same reason was urged against our proceeding directly for the Cape of Good Hope, with still more force, because no discovery of moment could be hoped for in that rout; it was therefore resolved that we should return by the East Indies, and that with this view we should, upon leaving the coast, steer westward, till we should fall in with the east coast of New Holland, and then follow the direction of that coast to the northward, till we should arrive at its northern extremity; but if that should be found impracticable, it was further resolved that we should endeavour to fall in with the land, or islands, said to have been discovered by Quiros.

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Friday 30.

With this view, at break of day on Saturday the 31st of March 1770, we got under sail, and put to sea, with the advantage of a fresh gale at S. E. and clear weather, taking our departure from the eastern point, which we had seen at noon on the 23d, and to which, on this occasion, I gave the name of CAPE FAREWELL.

The bay out of which we had just sailed I called ADMIRALTY BAY, giving the name of CAPE STEPHENS to the north west point, and of CAPE JACKSON to the south east, after the two gentlemen who at this time were Secretaries to the Board.

Admiralty Bay may easily be known by the island that has been just mentioned, which lies two miles N. E. of Cape Stephens, in latitude $40^{\circ} 37'$ S. longitude $185^{\circ} 6'$ W. and is of a considerable height. Between this island and Cape Farewell,

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Saturday 31.

which are between fourteen and fifteen leagues distant from each other, in the direction of W. by N. and E. by S. the shore forms a large deep bay, the bottom of which we could scarcely see while we were sailing in a strait line from one Cape to the other; it is, however, probably of less depth than it appeared to be, for as we found the water shallower here, than at the same distance from any other part of the coast, there is reason to suppose, that the land at the bottom which lies next the sea is low, and therefore not easily to be distinguished from it. I have for this reason called it BLIND BAY, and am of opinion that it is the same which was called Murderer's Bay by Tasman.

Such particulars of this country and its inhabitants, with their manners and customs, as could be learnt while we were circumnavigating the coast, shall now be related.

C H A P. VIII.

*A general Account of New Zealand: its first Discovery,
Situation, Extent, Climate, and Productions.*

NEW ZEALAND was first discovered by Abel Jansen Tasman, a Dutch navigator, whose name has been several times mentioned in this narrative, on the 13th of December, in the year 1642. He traversed the eastern coast from latitude 34° to 43 , and entered the strait which divides the two islands, and in the chart is called Cook's STREIGHT; but being attacked by the natives soon after he came to an anchor, in the place to which he gave the name of Murderer's Bay, he never went on shore. He gave the country the name of STAATEN LAND, or the land of the States, in honour of the States-General, and it is now generally distinguished in our maps and charts by the name of NEW ZEALAND. As the whole of this country, except that part of the coast which was seen by Tasman from on board his ship, has from his time, to the voyage of the Endeavour, remained altogether unknown, it has by many been supposed to be part of a southern continent. It is however now known to consist of two large islands, divided from each other by a strait or passage, which is about four or five leagues broad.

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These islands are situated between the latitudes of 34° and 48° S. and between the longitudes of 181° and 194° W. which is now determined with uncommon exactness, from innumerable observations of the sun and moon, and one of the

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transits of Mercury, by Mr. Green, a person of known abilities, who, as has been observed before, was sent out by the Royal Society, to observe the transit of Venus in the South Seas.

The northermost of these islands is called by the natives Eaheinomauwe, and the southermost Tovy, or Tavai Poenammoo; yet, as I have observed before, we are not sure whether the name Tovy Poenammoo comprehends the whole southern island, or only part of it. The figure and extent of these islands, with the situation of the bays and harbours they contain, and the smaller islands that lie about them, will appear from the chart that I have drawn, every part of which, however, I cannot vouch to be equally accurate. The coast of Eaheinomauwe, from Cape Palliser to East Cape, is laid down with great exactness, both in its figure, and the course and distance from point to point; for the opportunities that offered, and the methods that I used, were such as could scarcely admit of an error. From East Cape to St. Maria van Diemen, the chart, though perhaps not equally exact, is without any error of moment, except possibly in some few places which are here, and in other parts of the chart, distinguished by a dotted line, and which I had no opportunity to examine: from Cape Maria van Diemen to latitude $36^{\circ} 15'$, we were seldom nearer the shore than between five and eight leagues; and therefore the line that marks the sea coast may possibly be erroneous. From latitude $36^{\circ} 15'$ to nearly the length of Entry Island, our course was very near the shore, and in this part of the chart therefore there can be no material error, except perhaps at Cape Tierawitte. Between Entry Island and Cape Palliser we were again farther from the shore, and this part of the coast therefore may not be laid down with minute exactness; yet, upon the whole, I am of opinion that this island will be
found

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found not much to differ from the figure that I have given it, and that upon the coast there are few or no harbours which are not noticed in the journal, or delineated in the chart. I cannot however say as much of Tovy Poenammoo, the season of the year, and the circumstances of the voyage, would not permit me to spend so much time about this island as I had employed upon the other; and the storms that we met with made it both difficult and dangerous to keep near the shore. However, from Queen Charlotte's Sound to Cape Campbel, and as far to the S. W. as latitude 43° , the chart will be found pretty accurate. Between latitude 43° and latitude $44^{\circ} 20'$ the line may be doubted, for of some part of the coast which it represents, we had scarcely a view. From latitude $44^{\circ} 20'$, to Cape Saunders, our distance would not permit me to be particular, and the weather was besides extremely unfavourable. From Cape Saunders to Cape South, and even to Cape West, there is also reason to fear that the chart will in many places be found erroneous, as we were seldom able to keep the shore, and were sometimes blown to such a distance that it could not be seen. From Cape West to Cape Farewell, and even to Charlotte's Sound, it is not more to be trusted.

Tovy Poenammoo is for the most part a mountainous, and Country, to all appearance a barren country; and the people whom we saw in Queen Charlotte's Sound, those that came off to us under the snowy mountains, and the fires to the west of Cape Saunders, were all the inhabitants, and signs of inhabitants, that we discovered upon the whole island.

Eaheinomauwe has a much better appearance; it is indeed not only hilly but mountainous, yet even the hills and mountains are covered with wood, and every valley has a rivulet
of

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of water: the soil in these vallies, and in the plains, of which there are many that are not overgrown with wood, is in general light but fertile, and in the opinion of Mr. Banks and Dr. Solander, as well as of every other gentleman on board, every kind of European grain, plants, and fruit, would flourish here in the utmost luxuriance: from the vegetables that we found here, there is reason to conclude, that the winters are milder than those in England, and we found the summer not hotter, though it was more equally warm; so that if this country should be settled by people from Europe, they would, with a little industry, be very soon supplied not only with the necessaries, but the luxuries of life in great abundance.

Quadrupeds.

In this country there are no quadrupeds but dogs and rats, at least we saw no other, and the rats are so scarce that many of us never saw them. The dogs live with the people, who breed them for no other purpose than to eat: there might indeed be quadrupeds that we did not see, but this is not probable, because the chief pride of the natives, with respect to their dress, is in the skins and hair of such animals as they have, and we never saw the skin of any animal about them but those of dogs and birds: there are indeed seals upon the coast, and we once saw a sea lion, but we imagine they are seldom caught, for though we saw some of their teeth which were fashioned into an ornament like a bodkin, and worn by the natives at their breast, and highly valued, we saw none of their skins: there are whales also upon this coast, and though the people did not appear to have any art or instrument by which such an animal could be taken and killed, we saw pattoo-pattoos in the possession of some of them, which were made of the bone of a whale, or of some other animal whose bone had exactly the same appearance.

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Birds.

Of birds the species are not many; and of these none, except perhaps the gannet, is the same with those of Europe: here are ducks indeed, and fflags of several kinds, sufficiently resembling those of Europe, to be called the same, by those who have not examined them very nicely. Here are also hawks, owls, and quails, which differ but little from those of Europe at first sight; and several small birds, whose song, as has been remarked in the course of the narrative, is much more melodious than any that we had ever heard.

The sea coast is also visited by many oceanic birds, particularly albatrosses, sheerwaters, pintados, and a few of the birds which Sir John Narborough has called Penguins, and which indeed are what the French call *Nuance*, and seem to be a middle species between bird and fish; for their feathers, especially those upon their wings, differ very little from scales; and their wings themselves, which they use only in diving, and not to accelerate their motion even upon the surface of the water, may, perhaps with equal propriety, be called fins.

Neither are insects in greater plenty than birds: a few butterflies and beetles, flesh flies, very like those in Europe, and some musquitos and sand flies, perhaps exactly the same with those of North America, make up the whole catalogue. Of musquitos and sand flies, however, which are justly accounted the curse of every country where they abound, we did not see many; there were indeed a few in almost every place where we went on shore, but they gave us so little trouble, that we did not make use of the shades which we had provided for the security of our faces.

For this scarcity of animals upon the land, the sea, however, makes an abundant recompense; every creek swarm-
ing

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Fish.

ing with fish, which are not only wholesome, but equally delicious with those of Europe: the ship seldom anchored in any station, or with a light gale passed any place, that did not afford us enough with hook and line to serve the whole ship's company, especially to the southward: when we lay at anchor, the boats, with hook and line, near the rocks, could take fish in any quantity; and the seine seldom failed of producing a still more ample supply; so that both times when we anchored in Cook's Streight, every mess in the ship, that was not careless and improvident, salted as much as lasted many weeks after they went to sea. Of this article, the variety was equal to the plenty; we had mackrel of many kinds, among which, one was exactly the same as we have in England: these came in immense shoals, and were taken by the natives in their seines, who sold them to us at a very easy rate. Besides these, there were fish of many species which we had never seen before, but to all which the seamen very readily gave names; so that we talked here as familiarly of hakes, bream, cole-fish, and many others, as we do in England; and though they are by no means of the same family, it must be confessed that they do honour to the name. But the highest luxury which the sea afforded us, even in this place, was the lobster or sea cray-fish, which are probably the same that in the Account of Lord Anson's Voyage are said to have been found at the island of Juan Fernandes, except that, although large, they are not quite equal in size: they differ from ours in England in several particulars, they have a greater number of prickles on their backs, and they are red when first taken out of the water. These we also bought every where to the northward in great quantities of the natives, who catch them by diving near the shore, and finding out where they lie with their feet. We had also a fish that Frezier, in his Voyage to the Spanish Main in South Ame-

rica, has described by the names of *Elefant*, *Pejegallos*, or *Poison coq*, which though coarse, we eat very heartily. Several species of the skate, or sting-ray, are also found here, which were still coarser than the Elefant; but as an atonement, we had among many kinds of dog-fish one, spotted with white, which was in flavour exactly similar to our best skate, but much more delicious. We had also flat fish resembling both soles and flounders, besides eels and congers of various kinds, with many others of which those who shall hereafter visit this coast will not fail to find the advantage; and shell-fish in great variety, particularly clams, cockles, and oysters.

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Among the vegetable productions of this country, the trees claim a principal place; for here are forests of vast extent, full of the straightest, the cleanest, and the largest timber trees that we had ever seen; their size, their grain, and apparent durability, render them fit for any kind of building, and indeed for every other purpose except masts; for which, as I have already observed, they are too hard, and too heavy: there is one in particular which, when we were upon the coast, was rendered conspicuous by a scarlet flower, that seemed to be a compendage of many fibres; it is about as large as an oak, and the wood is exceedingly hard and heavy, and excellently adapted to the use of the mill-wright. There is another which grows in the swamps, remarkably tall and straight, thick enough to make masts for vessels of any size, and, if a judgment may be formed by the direction of its grain, very tough: this, which, as has been before remarked, our carpenter thought to resemble the pitch-pine, may probably be lightened by tapping, and it will then make the finest masts in the world: it has a leaf not unlike a yew, and bears berries in small bunches.

Trees, plants,
&c.

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Great part of the country is covered with a luxuriant verdure, and our natural historians were gratified by the novelty, if not the variety of the plants. Sow-thistle, garden night-shade, one or two kinds of grafs, the same as in England, and two or three kinds of fern, like those of the West Indies, with a few of the plants that are to be found in almost every part of the world, were all, out of about four hundred species, that have hitherto been described by any botanists, or had been seen elsewhere during the course of this voyage, except about five or six which had been gathered at Terra del Fuego.

Of eatable vegetables there are but few; our people, indeed, who had been long at sea, eat, with equal pleasure and advantage, of wild celery, and a kind of cresses, which grew in great abundance upon all parts of the sea-shore. We also, once or twice, met with a plant like what the country people in England call *Lamb's quarters*, or Fat-hen, which we boiled instead of greens; and once we had the good fortune to find a cabbage tree, which afforded us a delicious meal; and, except the fern-root, and one other vegetable, totally unknown in Europe, and which, though eaten by the natives, was extremely disagreeable to us, we found no other vegetable production that was fit for food, among those that appeared to be the wild produce of the country; and we could find but three esculent plants among those which are raised by cultivation, yams, sweet potatoes, and cocos. Of the yams and potatoes there are plantations consisting of many acres, and I believe that any ship which should happen to be here in the autumn, when they are dug up, might purchase them in any quantity.

Gourds are also cultivated by the natives of this place, the fruit of which furnishes them with vessels for various uses.

We also found here the Chinese paper mulberry tree, the same as that of which the inhabitants of the South Sea islands make their cloth; but it is so scarce, that though the New Zealanders also make cloth of it, they have not enough for any other purpose than to wear as an ornament in the holes which they make in their ears, as I have observed before.

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But among all the trees, shrubs, and plants of this country, there is not one that produces fruit, except a berry which has neither sweetness nor flavour, and which none but the boys took pains to gather, should be honoured with that appellation. There is, however, a plant that serves the inhabitants instead of hemp and flax, which excels all that are put to the same purposes in other countries. Of this plant there are two sorts; the leaves of both resemble those of flax, but the flowers are smaller, and their clusters more numerous; in one kind they are yellow, and in the other a deep red. Of the leaves of these plants, with very little preparation, they make all their common apparel; and of these they make also their strings, lines, and cordage for every purpose, which are so much stronger than any thing we can make with hemp, that they will not bear a comparison. From the same plant, by another preparation, they draw long slender fibres which shine like silk, and are as white as snow: of these, which are also surprisingly strong, the finer clothes are made; and of the leaves, without any other preparation than splitting them into proper breadths, and tying the strips together, they make their fishing nets; some of which, as I have before remarked, are of an enormous size.

A plant, which with such advantage might be applied to so many useful and important purposes, would certainly be

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a great acquisition to England, where it would probably thrive with very little trouble, as it seems to be hardy, and to affect no particular soil; being found equally in hill and valley; in the driest mould, and the deepest bogs: the bog, however, it seems rather to prefer, as near such places we observed it to be larger than elsewhere.

I have already observed, that we found great plenty of iron sand in Mercury Bay, and therefore that iron ore is undoubtedly to be found at no great distance. As to other metals we had scarcely knowledge enough of the country for conjecture.

If the settling of this country should ever be thought an object worthy the attention of Great Britain, the best place for establishing a colony would be either on the banks of the Thames, or in the country bordering upon the Bay of Islands. In either place there would be the advantage of an excellent harbour; and, by means of the river, settlements might be extended, and a communication established with the inland parts of the country: vessels might be built of the fine timber which abounds in these parts, at very little trouble and expence, fit for such a navigation as would answer the purpose. I cannot indeed exactly assign the depth of water which a vessel intended to navigate this river, even as far up as I went with the boat, should draw, because this depends upon the depth of water that is upon the bar, or flats, which lie before the narrow part of the river, for I had no opportunity to make myself acquainted with them; but I am of opinion, that a vessel which should draw not more than twelve feet would perfectly answer the purpose.

People.

When we first arrived upon the coast of this country, we imagined it to be much better peopled than we afterwards found

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found it, concluding that the inland parts were populous from the smoke that we saw at a considerable distance from the shore; and perhaps that may really be the case with respect to the country behind Poverty Bay, and the Bay of Plenty, where the inhabitants appeared to be more numerous than in other places. But we had reason to believe, that, in general, no part of the country but the sea-coast is inhabited; and even there we found the people but thinly scattered, all the western coast from Cape Maria Van Diemen to Mount Egmont being totally desolate; so that upon the whole the number of inhabitants bears no proportion to the extent of country.

C H A P. IX.

A Description of the Inhabitants, their Habitations, Apparel, Ornaments, Food, Cookery, and Manner of Life.

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THE stature of the men in general is equal to the largest of those in Europe: they are stout, well limbed, and fleshy; but not fat, like the lazy and luxurious inhabitants of the islands in the South Seas: they are also exceedingly vigorous and active; and have an adroitness, and manual dexterity in an uncommon degree, which are discovered in whatever they do. I have seen the strokes of fifteen paddles on a side in one of their canoes made with incredible quickness, and yet with such minute exactness of time, that all the rowers seemed to be actuated by one common soul. Their colour in general is brown; but in few deeper than that of a Spaniard, who has been exposed to the sun; in many not so deep. The women have not a feminine delicacy in their appearance, but their voice is remarkably soft; and by that, the dress of both sexes being the same, they are principally distinguished: they have, however, like the women of other countries, more airy cheerfulness, and a greater flow of animal spirits, than the other sex. Their hair, both of the head and beard, is black; and their teeth extremely regular, and as white as ivory: the features of both sexes are good; they seem to enjoy high health, and we saw many who appeared to be of a great age. The dispositions both of the men and women seemed to be mild and gentle; they treat each

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each other with the tenderest affection, but are implacable towards their enemies, to whom, as I have before observed, they never give quarter. It may perhaps, at first, seem strange, that where there is so little to be got by victory, there should so often be war; and that every little district of a country inhabited by people so mild and placid, should be at enmity with all the rest. But possibly more is to be gained by victory among these people than at first appears, and they may be prompted to mutual hostilities by motives which no degree of friendship or affection is able to resist. It appears, by the account that has already been given of them; that their principal food is fish, which can only be procured upon the sea-coast; and there, in sufficient quantities, only at certain times: the tribes, therefore, who live inland, if any such there are, and even those upon the coast, must be frequently in danger of perishing by famine. Their country produces neither sheep, nor goats, nor hogs, nor cattle; tame fowls they have none, nor any art by which those that are wild can be caught in sufficient plenty to serve as provision. If there are any whose situation cuts them off from a supply of fish, the only succedaneum of all other animal food, except dogs, they have nothing to support life, but the vegetables that have already been mentioned, of which the chief are fern root, yams, clams, and potatoes: when by any accident these fail, the distress must be dreadful; and even among the inhabitants of the coast, many tribes must frequently be reduced to nearly the same situation, either by the failure of their plantations, or the deficiency of their dry stock, during the season when but few fish are to be caught. These considerations will enable us to account, not only for the perpetual danger in which the people who inhabit this country appear to live, by the care which they take to fortify every village, but for the horrid practice of eating those who are killed in battle;

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battle ; for the hunger of him who is pressed by famine to fight, will absorb every feeling, and every sentiment which would restrain him from allaying it with the body of his adversary. It may however be remarked, that, if this account of the origin of so horrid a practice is true, the mischief does by no means end with the necessity that produced it: after the practice has been once begun on one side by hunger, it will naturally be adopted on the other by revenge. Nor is this all, for though it may be pretended, by some who wish to appear speculative and philosophical, that whether the dead body of an enemy be eaten or buried, is in itself a matter perfectly indifferent ; as it is, whether the breasts and thighs of a woman should be covered or naked ; and that prejudice and habit only make us shudder at the violation of custom in one instance, and blush at it in the other: yet, leaving this as a point of doubtful disputation, to be discussed at leisure, it may safely be affirmed, that the practice of eating human flesh, whatever it may be in itself, is relatively, and in its consequences, most pernicious ; tending manifestly to eradicate a principle which is the chief security of human life, and more frequently restrains the hand of murder than the sense of duty, or even the fear of punishment.

Among those who are accustomed to eat the dead, death must have lost much of its horror ; and where there is little horror at the sight of death, there will not be much repugnance to kill. A sense of duty, and fear of punishment, may be more easily surmounted than the feelings of Nature, or those which have been engrafted upon Nature by early prejudice and uninterrupted custom. The horror of the murderer arises less from the guilt of the fact, than its natural effect ; and he who has familiarised the effect, will consequently lose much of the horror. By our laws, and our religion,

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ligion, murder and theft incur the same punishment, both in this world and the next; yet, of the multitude who would deliberately steal, there are but very few who would deliberately kill, even to procure much greater advantage. But there is the strongest reason to believe, that those who have been so accustomed to prepare a human body for a meal, that they can with as little feeling cut up a dead man, as our cook-maids divide a dead rabbit for a fricassée, would feel as little horror in committing a murder as in picking a pocket, and consequently would take away life with as little compunction as property; so that men, under these circumstances, would be made murderers by the slight temptations that now make them thieves. If any man doubts whether this reasoning is conclusive, let him ask himself, whether in his own opinion he should not be safer with a man in whom the horror of destroying life is strong, whether in consequence of natural instinct un subdued, or of early prejudice, which has nearly an equal influence; than in the power of a man who under any temptation to murder him would be restrained only by considerations of interest; for to these all motives of mere duty may be reduced, as they must terminate either in hope of good, or fear of evil.

The situation and circumstances, however, of these poor people, as well as their temper, are favourable to those who shall settle as a colony among them. Their situation sets them in need of protection, and their temper renders it easy to attach them by kindness; and whatever may be said in favour of a savage life, among people who live in luxurious idleness upon the bounty of Nature, civilization would certainly be a blessing to those whom her parsimony scarcely furnishes with the bread of life, and who are perpetually destroying each other by violence, as the only alternative of perishing by hunger.

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But these people, from whatever cause, being inured to war, and by habit considering every stranger as an enemy, were always disposed to attack us when they were not intimidated by our manifest superiority. At first, they had no notion of any superiority but numbers; and when this was on their side, they considered all our expressions of kindness as the artifices of fear and cunning, to circumvent them, and preserve ourselves: but when they were once convinced of our power, after having provoked us to the use of our fire-arms, though loaded only with small shot; and of our clemency, by our forbearing to make use of weapons so dreadful except in our defence; they became at once friendly, and even affectionate, placing in us the most unbounded confidence, and doing every thing which could incite us to put equal confidence in them. It is also remarkable, that when an intercourse was once established between us, they were very rarely detected in any act of dishonesty. Before, indeed, and while they considered us as enemies, who came upon their coast only to make an advantage of them, they did not scruple by any means to make an advantage of us; and would, therefore, when they had received the price of any thing they had offered to sell, pack up both the purchase and the purchase-money with all possible composure, as so much lawful plunder from people who had no view but to plunder them.

I have observed that our friends in the South Seas had not even the idea of indecency, with respect to any object or any action; but this was by no means the case with the inhabitants of New Zealand, in whose carriage and conversation there was as much modest reserve and decorum with respect to actions, which yet in their opinion were not criminal, as are to be found among the politest people in Europe. The women were not impregnable; but the terms and manner
of

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of compliance were as decent as those in marriage among us, and according to their notions, the agreement was as innocent. When any of our people made an overture to one of their young women, he was given to understand that the consent of her friends was necessary, and by the influence of a proper present, it was generally obtained; but when these preliminaries were settled, it was also necessary to treat the wife for a night, with the same delicacy that is here required by the wife for life, and the lover who presumed to take any liberties by which this was violated, was sure to be disappointed.

One of our gentlemen having made his addresses to a family of the better sort, received an answer, which, translated into our language, according to the mode and spirit of it, as well as the letter, would have been exactly in these terms: "Any of these young ladies will think themselves honoured by your addresses, but you must first make me a suitable present, and you must then come and sleep with us on shore, for daylight must by no means be a witness of what passes between you."

I have already observed, that in personal cleanliness they are not quite equal to our friends at Otaheite; because, not having the advantage of so warm a climate, they do not so often go into the water; but the most disgusting thing about them is the oil, with which, like the Islanders, they anoint their hair: it is certainly the fat either of fish or of birds, melted down, and though the better sort have it fresh, their inferiors use that which is rancid, and consequently are almost as disagreeable to the smell as a Hottentot; neither are their heads free from vermin, though we observed that they were furnished with combs, both of bone and wood: these combs are sometimes worn stuck upright in the hair as an ornament,

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ornament, a fashion which at present prevails among the ladies of England. The men generally wear their beards short, and their hair tied upon the crown of the head in a bunch, in which they stick the feathers of various birds, in different manners, according to their fancies; sometimes one is placed on each side of the temples, pointing forwards, which we thought made a very disagreeable appearance. The women wear their hair sometimes cropped short, and sometimes flowing over their shoulders.

The bodies of both sexes are marked with the black stains called Amoco, by the same method that is used at Otaheite, and called Tattowing; but the men are more marked, and the women less. The women in general stain no part of their bodies but the lips, though sometimes they are marked with small black patches on other parts: the men, on the contrary, seem to add something every year to the ornaments of the last, so that some of them, who appeared to be of an advanced age, were almost covered from head to foot. Besides the Amoco, they have marks impressed by a method unknown to us, of a very extraordinary kind: they are furrows of about a line deep, and a line broad, such as appear upon the bark of a tree which has been cut through, after a year's growth: the edges of these furrows are afterwards indented by the same method, and being perfectly black, they make a most frightful appearance. The faces of the old men are almost covered with these marks; those who are very young, black only their lips like the women; when they are somewhat older, they have generally a black patch upon one cheek, and over one eye, and so proceed gradually, that they may grow old and honourable together: but though we could not but be disgusted with the horrid deformity which these stains and furrows produced in the "human face divine," we could not but admire the dexte-



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rity and art with which they were impressed. The marks upon the face in general are spirals, which are drawn with great nicety, and even elegance, those on one side exactly corresponding with those on the other: the marks on the body somewhat resemble the foliage in old chased ornaments, and the convolutions of fillagree work; but in these they have such a luxuriance of fancy, that of an hundred, which at first sight appeared to be exactly the same, no two were, upon a close examination, found to be alike. We observed, that the quantity and form of these marks were different in different parts of the coast, and that as the principal seat of them at Otaheite was the breech, in New Zealand it was sometimes the only part which was free, and in general was less distinguished than any other.

The skins of these people, however, are not only dyed, but painted, for as I have before observed, they smear their bodies with red oker, some rubbing it on dry, and some applying it in large patches mixed with oil, which is always wet, and which the least touch will rub off, so that the transgressions of such of our people as were guilty of ravishing a kiss from these blooming beauties, were most legibly written upon their faces.

The dress of a New Zealander is certainly, to a stranger at first sight, the most uncouth that can be imagined. It is made of the leaves of the flax, which has been described among the vegetable productions of this country: these leaves are split into three or four slips, and the slips, when they are dry, interwoven with each other into a kind of stuff between netting and cloth, with all the ends, which are eight or nine inches long, hanging out on the upper side, like the shag or thrumb matts, which we sometimes see lying in a passage. Of this cloth, if cloth it may be called,

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two pieces serve for a complete dress; one of them is tied over their shoulders with a string, and reaches as low as the knees; to the end of this string is fastened a bodkin of bone, which is easily passed through any two parts of this upper garment, so as to tack them together; the other piece is wrapped round the waist, and reaches nearly to the ground: the lower garment, however, is worn by the men only upon particular occasions; but they wear a belt, to which a string is fastened, for a very singular use. The inhabitants of the South Sea islands slit up the prepuce so as to prevent it from covering the glans of the penis, but these people, on the contrary, bring the prepuce over the glans, and to prevent it from being drawn back by the contraction of the part, they tie the string which hangs from their girdle, round the end of it. The glans indeed seemed to be the only part of their body which they were solicitous to conceal, for they frequently threw off all their dress but the belt and string, with the most careless indifference, but shewed manifest signs of confusion, when, to gratify our curiosity, they were requested to untie the string, and never consented but with the utmost reluctance and shame. When they have only their upper garment on, and sit upon their hams, they bear some resemblance to a thatched house; but this covering, though it is ugly, is well adapted to the use of those who frequently sleep in the open air, without any other shelter from the rain.

But besides this coarse shag or thatch, they have two sorts of cloth, which have an even surface, and are very ingeniously made, in the same manner with that manufactured by the inhabitants of South America, some of which we procured at Rio de Janeiro. One sort is as coarse as our coarsest canvas, and somewhat resembles it in the manner of laying the threads, but it is ten times as strong: the other is

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formed by many threads lying very close one way, and a few crossing them the other, so as to bind them together; but these are about half an inch asunder, somewhat like the round pieces of cane matting which are sometimes placed under the dishes upon a table. This is frequently striped, and always had a pretty appearance, for it is composed of the fibres of the same plant, which are prepared so as to shine like silk. It is made in a kind of frame of the size of the cloth, generally about five feet long, and four broad, across which the long threads, which lie close together, or warp, are strained, and the cross threads, or woof, are worked in by hand, which must be a very tedious operation.

To both these kinds of cloth they work borders of different colours, in stitches, somewhat like carpeting, or rather like those used in the samplers which girls work at school. These borders are of various patterns, and wrought with a neatness, and even an elegance, which, considering they have no needle, is surprising: but the great pride of their dress consists in the fur of their dogs, which they use with such economy that they cut it into stripes, and sew them upon their cloth at a distance from each other, which is a strong proof that dogs are not plenty among them; these stripes are also of different colours, and disposed so as to produce a pleasing effect. We saw some dresses that were adorned with feathers instead of fur, but these were not common; and we saw one that was entirely covered with the red feathers of the parrot.

The dress of the man who was killed, when we first went ashore in Poverty Bay, has been described already; but we saw the same dress only once more during our stay upon the coast, and that was in Queen Charlotte's Sound.

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The women, contrary to the custom of the sex in general, seemed to affect dress rather less than the men: their hair, which, as I have observed before, is generally cropt short, is never tied upon the top of the head when it is suffered to be long, nor is it ever adorned with feathers. Their garments were made of the same materials, and in the same form, as those of the other sex, but the lower one was always bound fast round them, except when they went into the water to catch lobsters, and then they took great care not to be seen by the men. Some of us happening one day to land upon a small island in Tolaga Bay, we surprized several of them at this employment; and the chaste Diana, with her nymphs, could not have discovered more confusion and distress at the sight of Actæon, than these women expressed upon our approach. Some of them hid themselves among the rocks, and the rest crouched down in the sea till they had made themselves a girdle and apron of such weeds as they could find, and when they came out, even with this veil, we could perceive that their modesty suffered much pain by our presence. The girdle and apron which they wear in common, have been mentioned before.

Both sexes bore their ears, and by stretching them the holes become large enough to admit a finger at least. In these holes they wear ornaments of various kinds, cloth, feathers, bones of large birds, and even sometimes a stick of wood; and to these receptacles of finery they generally applied the nails which we gave them, and every thing which it was possible they could contain. The women sometimes thrust through them the down of the albatross, which is as white as snow, and which, spreading before and behind the hole in a bunch almost as big as the fist, makes a very singular, and however strange it may be thought, not a disagreeable

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agreeable appearance. Besides the ornaments that are thrust through the holes of the ears, many others are suspended to them by strings; such as chiffls or bodkins made of green talc, upon which they set a high value, the nails and teeth of their deceased relations, the teeth of dogs, and every thing else that they can get, which they think either curious or valuable. The women also wear bracelets and anclets, made of the bones of birds, shells, or any other substances which they can perforate and string upon a thread. The men had sometimes hanging to a string, which went round the neck, a piece of green talc, or whalebone, somewhat in the shape of a tongue, with the rude figure of a man carved upon it; and upon this ornament they set a high value. In one instance, we saw the gristle that divides the nostrils, and called by anatomists, the *septum nasi*, perforated, and a feather thrust through the whole, which projected on each side over the cheeks: it is probable that this frightful singularity was intended as an ornament, but of the many people we saw, we never observed it in any other, nor even a perforation that might occasionally serve for such a purpose.

Their houses are the most inartificially made of any thing among them, being scarcely equal, except in size, to an English dog-kennel: they are seldom more than eighteen or twenty feet long, eight or ten broad, and five or six high, from the pole that runs from one end to the other, and forms the ridge, to the ground: the framing is of wood, generally slender sticks, and both walls and roof consist of dry grafs and hay, which, it must be confessed, is very tightly put together; and some are also lined with the bark of trees, so that in cold weather they must afford a very comfortable retreat. The roof is sloping, like those of our barns, and the door is at one end, just high enough to admit a man, creeping upon his hands and knees: near the door is a square

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hole, which serves the double office of window and chimney, for the fire-place is at that end, nearly in the middle between the two sides: in some conspicuous part, and generally near the door, a plank is fixed, covered with carving after their manner: this they value as we do a picture, and in their estimation it is not an inferior ornament: the side-walls and roof project about two feet beyond the walls at each end, so as to form a kind of porch, in which there are benches for the accommodation of the family. That part of the floor which is allotted for the fire-place, is enclosed in a hollow square, by partitions either of wood or stone, and in the middle of it the fire is kindled. The floor, along the inside of the walls, is thickly covered with straw, and upon this the family sleep.

Furniture.

Their furniture and implements consist of but few articles, and one chest commonly contains them all, except their provision-baskets, the gourds that hold their fresh water, and the hammers that are used to beat their fern-root, which generally stand without the door: some rude tools, their cloaths, arms, and a few feathers to stick in their hair, make the rest of their treasure.

Some of the better sort, whose families are large, have three or four houses enclosed within a court-yard, the walls of which are constructed of poles and hay, and are about ten or twelve feet high.

When we were on shore in the district called Tolaga, we saw the ruins, or rather the frame of a house, for it had never been finished, much superior in size to any that we saw elsewhere: it was thirty feet in length, about fifteen in breadth, and twelve high: the sides of it were adorned with many carved planks, of a workmanship much superior to any other that we had met with in the country; but for

what purpose it was built, or why it was deserted, we could never learn.

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But these people, though in their houses they are so well defended from the inclemency of the weather, seem to be quite indifferent whether they have any shelter at all during their excursions in search of fern roots and fish, sometimes setting up a small shade to windward, and sometimes altogether neglecting even that precaution, sleeping with their women and children under bushes, with their weapons ranged round them, in the manner that has already been described. The party consisting of forty or fifty, whom we saw at Mercury Bay, in a district which the natives call Opoorage, never erected the least shelter while we staid there, though it sometimes rained incessantly for four and twenty hours together.

Food.

The articles of their food have been enumerated already; the principal, which to them is what bread is to the inhabitants of Europe, is the roots of the fern which grows upon the hills, and is nearly the same with what grows upon our high commons in England, and is called indifferently fern, bracken, or brakes. The birds which sometimes serve them for a feast, are chiefly penguins and albatrosses, with a few other species that have been occasionally mentioned in this narrative.

Cookery.

Having no vessel in which water can be boiled, their cookery consists wholly of baking and roasting. They bake nearly in the same manner as the inhabitants of the South Seas, and to the account that has been already given of their roasting, nothing need be added, but that the long skewer or spit to which the flesh is fastened, is placed sloping towards the fire, by setting one stone against the bottom of it, and supporting it near the middle with another, by the moving

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of which to a greater or less distance from the end, the degree of obliquity is increased or diminished at pleasure.

To the northward, as I have observed, there are plantations of yams, sweet potatoes, and coccos, but we saw no such to the southward; the inhabitants therefore of that part of the country must subsist wholly upon fern root and fish, except the scanty and accidental resource which they may find in sea fowl and dogs; and that fern and fish are not to be procured at all seasons of the year, even at the sea side, and upon the neighbouring hills, is manifest from the stores of both that we saw laid up dry, and the reluctance which some of them expressed at selling any part of them to us when we offered to purchase them, at least the fish, for sea stores: and this particular seems to confirm my opinion that this country scarcely sustains the present number of its inhabitants, who are urged to perpetual hostilities by hunger, which naturally prompted them to eat the dead bodies of those who were slain in the contest.

Water is their universal and only liquor, as far as we could discover, and if they have really no means of intoxication, they are, in this particular, happy beyond any other people that we have yet seen or heard of.

As there is perhaps no source of disease either critical or chronic, but intemperance and inactivity; it cannot be thought strange that these people enjoy perfect and uninterrupted health: in all our visits to their towns, where young and old, men and women, crowded about us, prompted by the same curiosity that carried us to look at them, we never saw a single person who appeared to have any bodily complaint, nor among the numbers that we have seen naked, did we once perceive the slightest eruption upon the skin, or any marks that an eruption had left behind: at first, indeed,

observing

observing that some of them when they came off to us were marked in patches with a white flowery appearance upon different parts of their bodies, we thought that they were leperous, or highly scorbutic; but upon examination we found that these marks were owing to their having been wetted by the spray of the sea in their passage, which, when it was dried away, left the salts behind it in a fine white powder.

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Another proof of health, which we have mentioned upon a former occasion, is the facility with which the wounds healed that had left scars behind them, and that we saw in a recent state; when we saw the man who had been shot with a musket ball through the fleshy part of his arm, his wound seemed to be so well digested, and in so fair a way of being perfectly healed, that if I had not known no application had been made to it, I should certainly have enquired, with a very interested curiosity, after the vulnerary herbs and surgical art of the country.

A farther proof that human nature is here untainted with disease, is the great number of old men that we saw, many of whom, by the loss of their hair and teeth, appeared to be very ancient, yet none of them were decrepit, and though not equal to the young in muscular strength, were not at all behind them in cheerfulness and vivacity.

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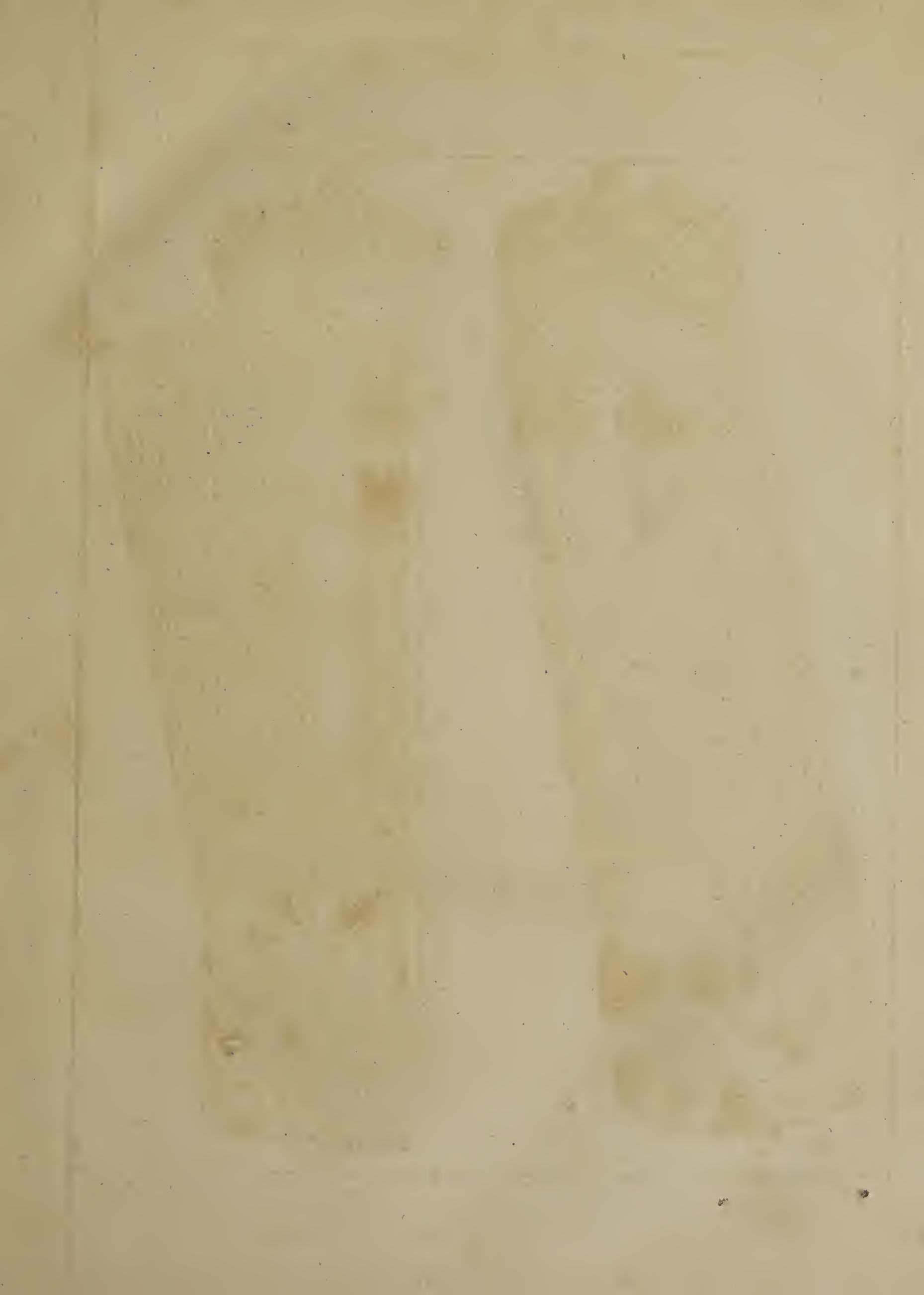
Of the Canoes and Navigation of the Inhabitants of New Zealand; their Tillage, Weapons, and Music: Government, Religion, and Language: With some Reasons against the Existence of a Southern Continent.

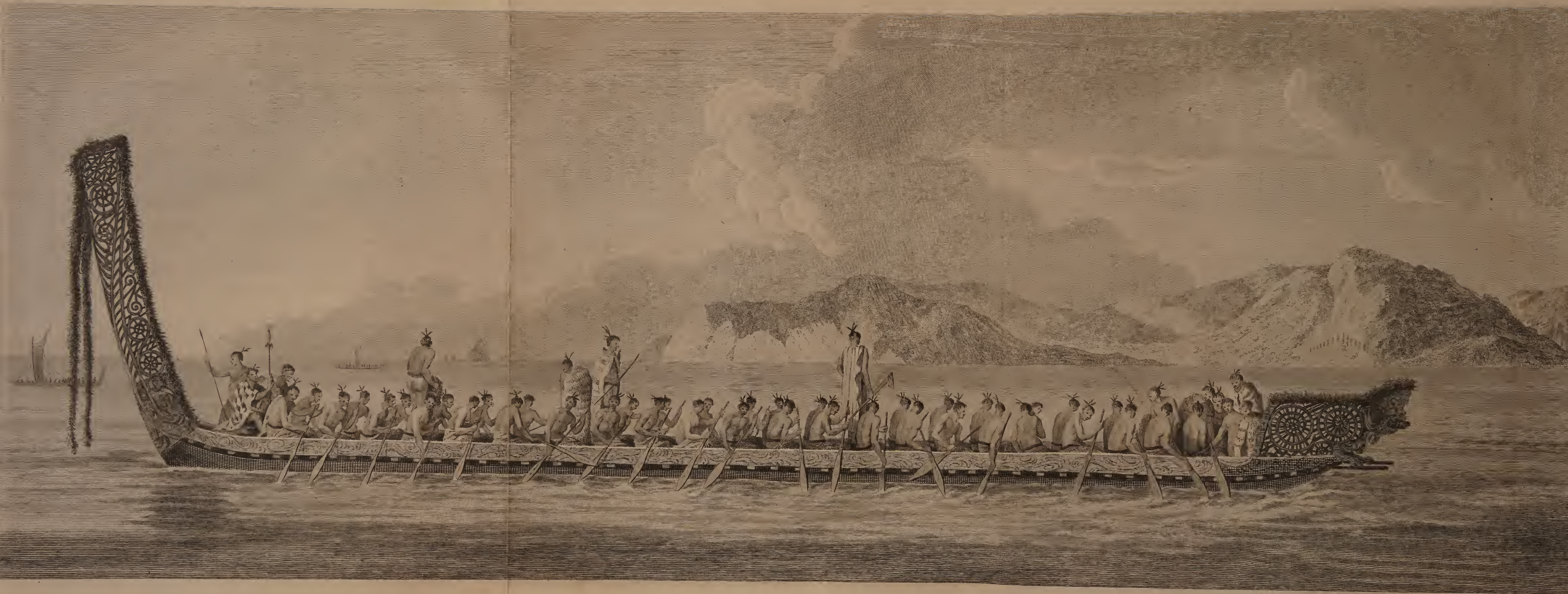
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Canoes, &c.

THE ingenuity of these people appears in nothing more than in their canoes: they are long and narrow, and in shape very much resemble a New England whale boat: the larger sort seem to be built chiefly for war, and will carry from forty to eighty, or an hundred armed men. We measured one which lay ashore at Tolaga: she was sixty-eight feet and an half long, five feet broad, and three feet and an half deep; the bottom was sharp, with strait sides like a wedge, and consisted of three lengths, hollowed out to about two inches, or an inch and an half thick, and well fastened together with strong plaiting: each side consisted of one intire plank, sixty-three feet long, ten or twelve inches broad, and about an inch and quarter thick, and these were fitted and lashed to the bottom part with great dexterity and strength. A considerable number of thwarts were laid from gunwale to gunwale, to which they were securely lashed on each side, as a strengthening to the boat. The ornament at the head projected five or six feet beyond the body, and was about four feet and an half high; the ornament at the stern was fixed upon that end, as the stern-post of a ship is upon her keel, and was about fourteen feet high, two feet broad, and an inch and an half thick. They both







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both consisted of boards of carved work, of which the design was much better than the execution. All their canoes, except a few at Opoorage or Mercury Bay, which were of one piece, and hollowed by fire, are built after this plan, and few are less than twenty feet long: some of the smaller sort have outriggers, and sometimes two of them are joined together, but this is not common. The carving upon the stern and head ornaments of the inferior boats, which seem to be intended wholly for fishing, consists of the figure of a man, with a face as ugly as can be conceived, and a monstrous tongue thrust out of the mouth, with the white shells of sea-ears stuck in for the eyes. But the canoes of the superior kind, which seem to be their men of war, are magnificently adorned with open work, and covered with loose fringes of black feathers, which had a most elegant appearance: the gunwale boards were also frequently carved in a grotesque taste, and adorned with tufts of white feathers placed upon a black ground. Of visible objects that are wholly new, no verbal description can convey a just idea, but in proportion as they resemble some that are already known, to which the mind of the reader must be referred: the carving of these people being of a singular kind, and not in the likeness of any thing that is known on our side of the ocean, either "in the heaven above, or in the earth beneath, or in the waters that are under the earth," I must refer wholly to the representations which will be found of it in Plate XV.

The paddles are small, light, and neatly made; the blade is of an oval shape, or rather of a shape resembling a large leaf, pointed at the bottom, broadest in the middle, and gradually losing itself in the shaft, the whole length being about six feet, of which the shaft or loom including the handle is four,

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four, and the blade two. By the help of these oars they push on their boats with amazing velocity.

In failing they are not expert, having no art of going otherwise than before the wind: the sail is of netting or matt, which is set up between two poles that are fixed upright upon each gunwale, and serve both for masts and yards: two ropes answered the purpose of sheets, and were consequently fastened above to the top of each pole. But clumsy and inconvenient as this apparatus is, they make good way before the wind, and are steered by two men who sit in the stern, with each a paddle in his hand for that purpose.

Tools.

Having said thus much of their workmanship, I shall now give some account of their tools; they have adzes, axes, and chissels, which serve them also as augers for the boring of holes: as they have no metal, their adzes and axes are made of a hard black stone, or of a green talc, which is not only hard but tough; and their chissels of human bone, or small fragments of jasper, which they chip off from a block in sharp angular pieces like a gun-flint. Their axes they value above all that they possess, and never would part with one of them for any thing that we could give: I once offered one of the best axes I had in the ship, besides a number of other things for one of them, but the owner would not sell it; from which I conclude that good ones are scarce among them. Their small tools of jasper, which are used in finishing their nicest work, they use till they are blunt, and then, as they have no means of sharpening them, throw them away. We had given the people at Tolaga a piece of glass, and in a short time they found means to drill a hole through it, in order to hang it round the neck as an ornament by a thread; and we imagine the tool must have been a piece of this jasper. How they bring their large tools first to an edge,

edge, and sharpen the weapon which they call Patoo-Patoo, we could not certainly learn; but probably it is by bruising the same substance to powder, and, with this, grinding two pieces against each other.

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Their nets, particularly their seine, which is of an enormous size, have been mentioned already: one of these seems to be the joint work of a whole town, and I suppose it to be the joint property also: the other net, which is circular, and extended by two or three hoops, has been particularly described as well as the manner of baiting and using it. Their hooks are of bone or shell, and in general are ill made. To receive the fish when it is caught, and to hold their other provisions, they have baskets of various kinds and dimensions, very neatly made of wicker work.

Nets.

They excel in tillage, as might naturally be expected where the person that sows is to eat the produce, and where there is so little besides that can be eaten: when we first came to TEGADOO, a district between Poverty Bay and East Cape, their crops were just covered, and had not yet begun to sprout; the mould was as smooth as in a garden, and every root had its small hillock, ranged in a regular quincunx by lines, which with the pegs were still remaining in the field. We had not an opportunity to see any of these husbandmen work, but we saw what serves them at once for spade and plough: this instrument is nothing more than a long narrow stake sharpened to an edge at one end, with a short piece fastened transversely at a little distance above it, for the convenience of pressing it down with the foot. With this they turn up pieces of ground six or seven acres in extent, though it is not more than three inches broad; but as the soil is light and sandy it makes little resistance.

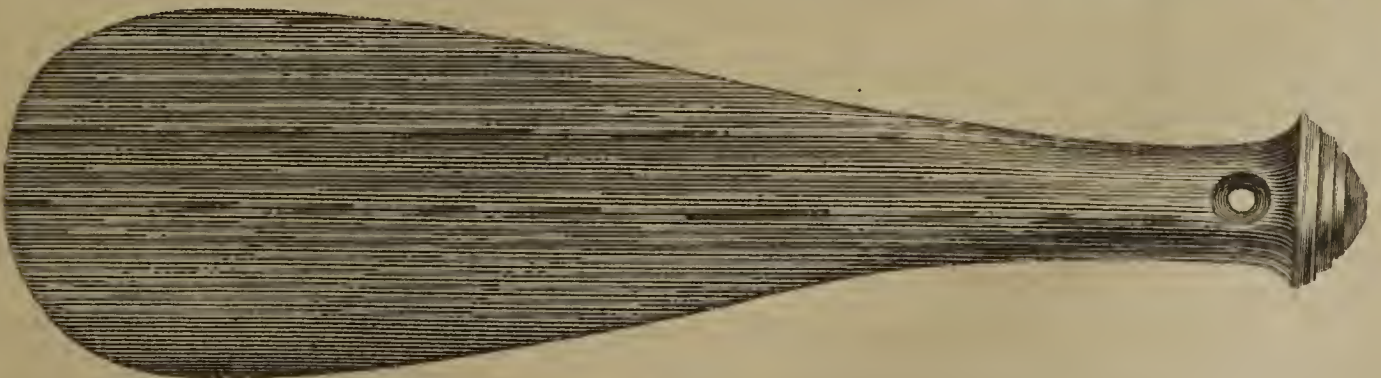
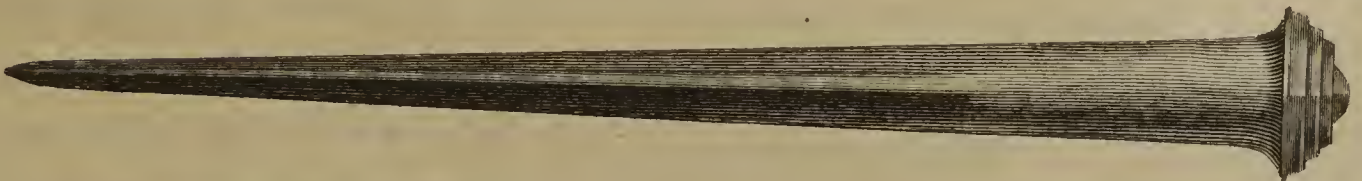
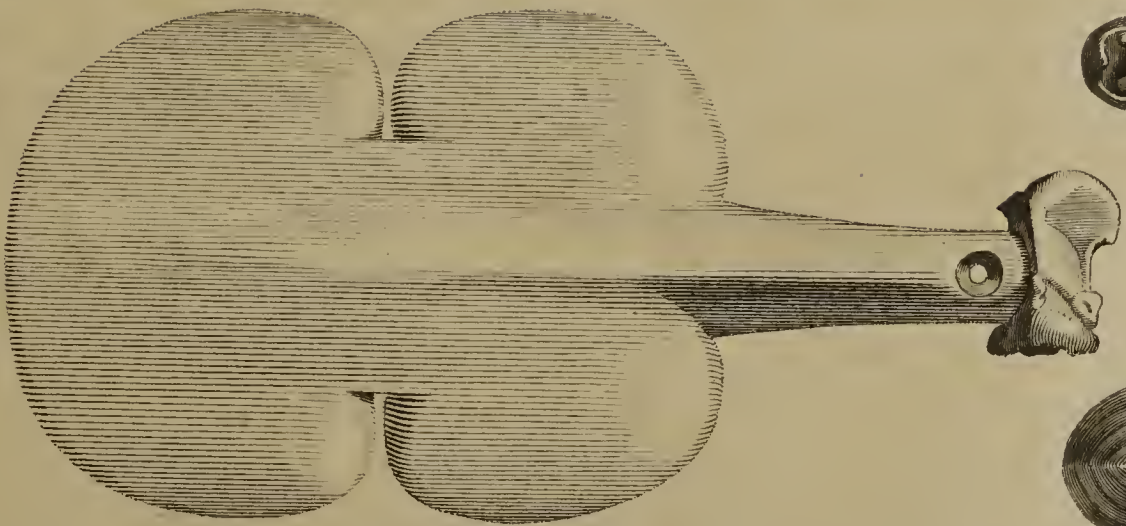
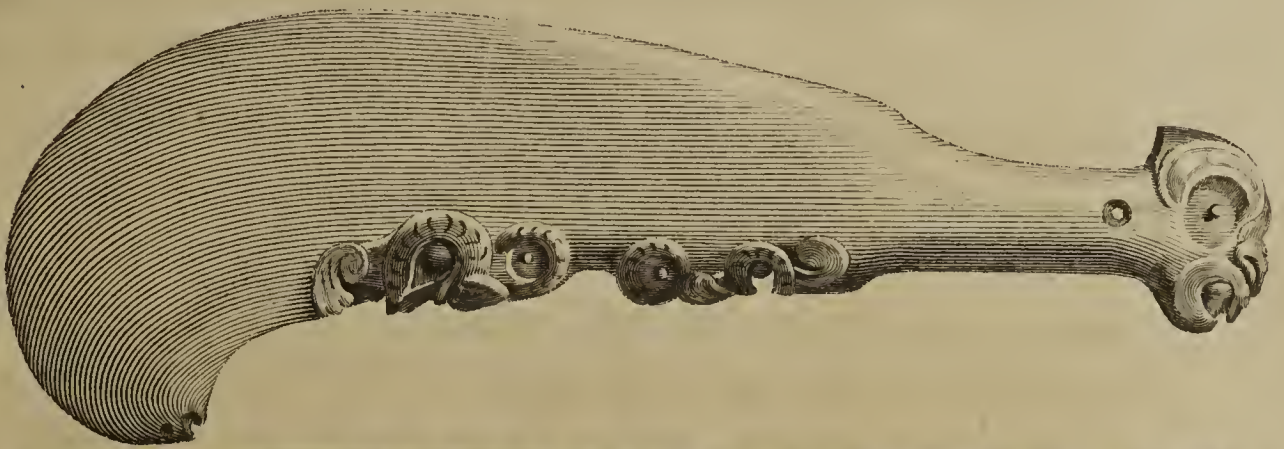
Tillage.

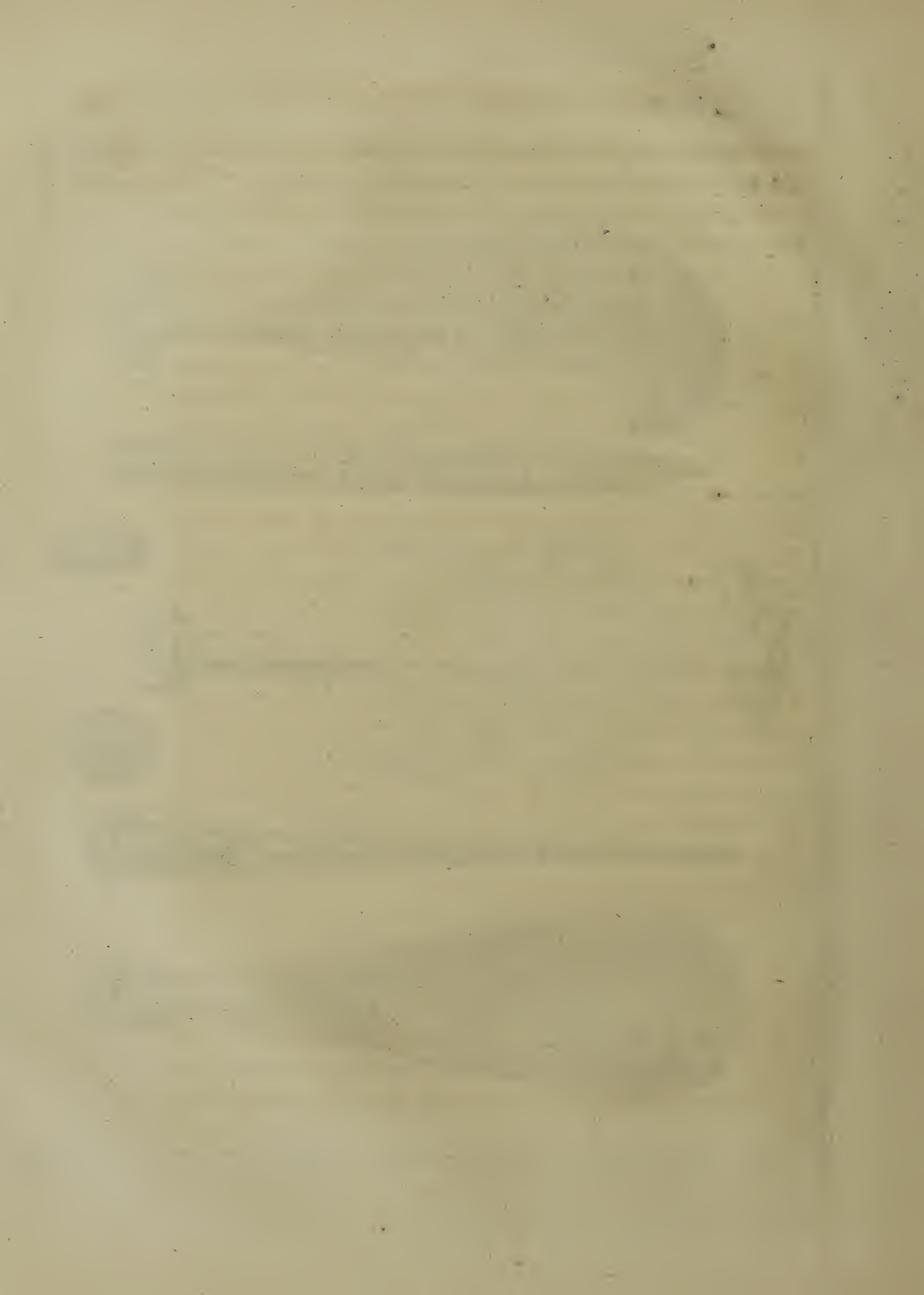
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Tillage, weaving, and the other arts of peace, seem to be best known and most practised in the northern part of this country; for there is little appearance of any of them in the South: but the arts of war flourish equally through the whole coast.

Weapons.

Of weapons they have no great variety, but such as they have are well fitted for destruction; they have spears, darts, battle-axes, and the Patoo-Patoo. The spear is fourteen or fifteen feet long, pointed at both ends, and sometimes headed with bone: these are grasped by the middle, so that the part behind balancing that before, makes a push more difficult to be parried, than that of a weapon which is held by the end. The dart and other weapons have been sufficiently described already; and it has also been remarked, that these people have neither sling nor bow. They throw the dart by hand, and so they do stones; but darts and stones are seldom used except in defending their forts. Their battles, whether in boats or on shore, are generally hand to hand, and the slaughter must consequently be great, as a second blow with any of their weapons is unnecessary, if the first takes place: their trust, however, seems to be principally placed in the Patoo-Patoo, which is fastened to their wrists by a strong strap, lest it should be wrenched from them, and which the principal people generally wear sticking in their girdles, considering it as a military ornament, and part of their dress, like the poinard of the Asiatic, and the sword of the European. They have no defensive armour; but, besides their weapons, the Chiefs carried a staff of distinction, in the same manner as our officers do the spontoon: this was generally the rib of a whale, as white as snow, with many ornaments of carved work, dog's hair, and feathers; but sometimes it was a stick, about six feet long, adorned in





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the same manner, and inlaid with a shell like mother-of-pearl. Those who bore this mark of distinction were generally old, at least past the middle age, and were also more marked with the *Amoco* than the rest.

One or more persons, thus distinguished, always appeared in each canoe, when they came to attack us, according to the size of it. When they came within about a cable's length of the ship, they used to stop, and the Chiefs rising from their seat, put on a dress which seemed appropriated to the occasion, generally of dog's skin, and holding out their decorated staff, or a weapon, directed the rest of the people what they should do. When they were at too great a distance to reach us with a lance or a stone, they presumed that we had no weapon with which we could reach them; here then the defiance was given, and the words were almost universally the same, *Haromai, haromai, harre uta a Patoo-Patoo oge*: "Come to us, come on shore, and we will kill you all with our Patoo-Patoos." While they were uttering these menaces they came gradually nearer and nearer, till they were close alongside; talking at intervals in a peaceable strain, and answering any questions that we asked them; and at intervals renewing their defiance and threats, till being encouraged by our apparent timidity, they began their war-song and dance, as a prelude to an attack, which always followed, and was sometimes continued till it became absolutely necessary to repress them by firing some small-shot; and sometimes ended after throwing a few stones on board, as if content with having offered us an insult which we did not dare to revenge.

The war-dance consists of a great variety of violent motions, and hideous contortions of the limbs, during which the countenance also performs its part: the tongue is frequently

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quently thrust out to an incredible length, and the eye-lids so forcibly drawn up that the white appears both above and below, as well as on each side of the iris, so as to form a circle round it; nor is any thing neglected that can render the human shape frightful and deformed: at the same time they brandish their spears, shake their darts, and cleave the air with their Patoo-Patoos. This horrid dance is always accompanied by a song; it is wild indeed, but not disagreeable, and every strain ends in a loud and deep sigh, which they utter in concert. In the motions of the dance, however horrid, there is a strength, firmness, and agility, which we could not but behold with admiration; and in their song they keep time with such exactness, that I have often heard above an hundred paddles struck against the sides of their boats at once, so as to produce but a single sound, at the divisions of their music.

A song not altogether unlike this, they sometimes sing without the dance, and as a peaceable amusement: they have also other songs which are sung by the women, whose voices are remarkably mellow and soft, and have a pleasing and tender effect; the time is slow, and the cadence mournful; but it is conducted with more taste than could be expected among the poor ignorant savages of this half desolate country; especially as it appeared to us, who were none of us much acquainted with music as a science, to be sung in parts; it was at least sung by many voices at the same time:

They have sonorous instruments, but they can scarcely be called instruments of music; one is the shell, called the Triton's trumpet, with which they make a noise not unlike that which our boys sometimes make with a cow's horn: the other is a small wooden pipe, resembling a child's nine-pin, only much smaller, and in this there is no more music than
in

in a pea-whistle. They seem sensible indeed that these instruments are not musical; for we never heard an attempt to sing to them, or to produce with them any measured tones that bore the least resemblance to a tune.

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To what has been already said of the practice of eating human flesh, I shall only add, that in almost every cove where we landed, we found flesh bones of men near the places where fires had been made; and that among the heads that were brought on board by the old man, some seemed to have false eyes, and ornaments in their ears as if alive. That which Mr. Banks bought was sold with great reluctance by the possessor: the head was manifestly that of a young person about fourteen or fifteen years of age, and by the contusions on one side appeared to have received many violent blows, and indeed a part of the bone near the eye was wanting. These appearances confirmed us in the opinion that the natives of this country give no quarter, nor take any prisoners to be killed and eaten at a future time, as is said to have been a practice among the Indians of Florida: for if prisoners had been taken, this poor young creature, who cannot be supposed capable of making much resistance, would probably have been one, and we knew that he was killed with the rest, for the fray had happened but a few days before.

The towns or Hippahs of these people, which are all fortified, have been sufficiently described already, and from the Bay of Plenty to Queen Charlotte's Sound they seem to be the constant residence of the people: but about Poverty Bay, Hawk's Bay, Tegadoo, and Tolaga, we saw no Hippahs, but single houses scattered at a distance from each other; yet upon the sides of the hills there were stages of a great length, furnished with stones and darts, probably as retreats for the people.

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people at the last extremity, as upon these stages a fight may be carried on with much advantage against those below, who may be reached with great effect by darts and stones, which it is impossible for them to throw up with equal force. And indeed the forts themselves seem to be no farther serviceable than by enabling the possessors to repel a sudden attack; for as there is no supply of water within the lines, it would be impossible to sustain a siege. A considerable stock of fern-root and dry fish is indeed laid up in them; but they may be reserved against seasons of scarcity, and that such seasons there are, our observations left us no room to doubt; besides, while an enemy should be prowling in the neighbourhood, it would be easy to snatch a supply of water from the side of the hill, though it would be impossible to dig up fern root or catch fish.

In this district, however, the people seemed to live in a state of conscious security, and to avail themselves of their advantage: their plantations were more numerous, their canoes were more decorated, and they had not only finer carving, but finer clothes. This part of the coast also was much the most populous, and possibly their apparent peace and plenty might arise from their being united under one Chief, or King; for the inhabitants of all this part of the country told us, that they were the subjects of Teratu: when they pointed to the residence of this Prince, it was in a direction which we thought inland; but which, when we knew the country better, we found to be the Bay of Plenty.

Government.

It is much to be regretted that we were obliged to leave this country without knowing any thing of Teratu but his name. As an Indian monarch, his territory is certainly extensive: he was acknowledged from Cape Kidnappers to the northward, and westward as far as the Bay of Plenty, a length
of

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of coast upwards of eighty leagues; and we do not yet know how much farther westward his dominions may extend. Possibly the fortified towns which we saw in the Bay of Plenty may be his barrier; especially as at Mercury Bay he was not acknowledged, nor indeed any other single Chief: for wherever we landed, or spoke with the people upon that coast, they told us that we were at but a small distance from their enemies.

In the dominions of Teratu we saw several subordinate Chiefs, to whom great respect was paid, and by whom justice was probably administered; for upon our complaint to one of them, of a theft that had been committed on board the ship by a man that came with him, he gave him several blows and kicks, which the other received as the chastisement of authority, against which no resistance was to be made, and which he had no right to resent. Whether this authority was possessed by appointment or inheritance we could not learn; but we observed that the Chiefs, as well here as in other parts, were elderly men. In other parts, however, we learnt that they possessed their authority by inheritance.

The little societies which we found in the southern parts seemed to have several things in common, particularly their fine clothes and fishing nets. Their fine clothes, which possibly might be the spoils of war, were kept in a small hut, which was erected for that purpose in the middle of the town: the nets we saw making in almost every house, and the several parts being afterwards collected were joined together. Less account seems to be made of the women here than in the South Sea islands; such at least was the opinion of Tupia, who complained of it as an indignity to the sex. We observed that the two sexes eat together; but how they divide their

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their labour we do not certainly know. I am inclined to believe that the men till the ground, make nets, catch birds, and go out in their boats to fish; and that the women dig up fern roots, collect lobsters and other shell fish near the beach, dress the victuals, and weave cloth: such at least were their employments when we had an opportunity of observing them, which was but seldom; for in general our appearance made a holiday wherever we went, men, women and children, flocking round us, either to gratify their curiosity, or to purchase some of the valuable merchandize which we carried about with us, consisting principally of nails, paper, and broken glafs.

Religion.

Of the religion of these people it cannot be supposed that we could learn much; they acknowledge the influence of superior beings, one of whom is supreme, and the rest subordinate; and gave nearly the same account of the origin of the world, and the production of mankind, as our friends in Otaheite: Tupia, however, seemed to have a much more deep and extensive knowlege of these subjects than any of the people here; and whenever he was disposed to instruct them, which he sometimes did in a long discourse, he was sure of a numerous audience, who listened in profound silence, with such reverence and attention, that we could not but wish them a better teacher.

What homage they pay to the deities they acknowledge we could not learn; but we saw no place of public worship, like the Morais of the South Sea islands: yet we saw, near a plantation of sweet potatoes, a small area, of a square figure, surrounded with stones, in the middle of which one of the sharpened stakes which they use as a spade was set up, and upon it was hung a basket of fern roots: upon enquiry, the natives told us, that it was an offering to the gods, by which

the owner hoped to render them propitious, and obtain a plentiful crop.

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Dead.

As to their manner of disposing of their dead, we could form no certain opinion of it, for the accounts that we received by no means agreed. In the northern parts, they told us that they buried them in the ground; and in the southern, that they threw them into the sea: it is however certain that we saw no grave in the country, and that they affected to conceal every thing relating to their dead with a kind of mysterious secrecy. But whatever may be the sepulchre, the living are themselves the monuments; for we saw scarcely a single person of either sex whose body was not marked by the scars of wounds which they had inflicted upon themselves as a testimony of their regret for the loss of a relation or friend: some of these wounds we saw in a state so recent that the blood was scarcely staunched, which shows that death had been among them while we were upon the coast; and makes it more extraordinary that no funeral ceremony should have fallen under our notice: some of the scars were very large and deep, and in many instances had greatly disfigured the face. One monument indeed we observed of another kind, the cross that was set up near Queen Charlotte's Sound.

Having now given the best account in my power of the customs and opinions of the inhabitants of New Zealand, with their boats, nets, furniture, and dress, I shall only remark, that the similitude between these particulars here and in the South Sea islands is a very strong proof that the inhabitants have the same origin; and that the common ancestors of both, were natives of the same country. They have both a tradition that their ancestors, at a very remote period of time, came from another country; and, according to the

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tradition of both, that the name of that country was HEA-
WIJE; but the similitude of the language seems to put the
matter altogether out of doubt. I have already observed, that
Tupia, when he accosted the people here in the language of
his own country, was perfectly understood; and I shall give
a specimen of the similitude by a list of words in both lan-
guages, according to the dialect of the northern and south-
ern islands of which New Zealand consists, by which it will
appear that the language of Otaheite does not differ more
from that of New Zealand, than the language of the two
islands from each other.

ENGLISH.	NEW ZEALAND.		OTAHEITE.
	<i>Northern.</i>	<i>Southern.</i>	
<i>A Chief,</i>	Eareete,	Eareete,	Earee.
<i>A man,</i>	Taata,	Taata,	Taata.
<i>A woman,</i>	Whahine,	Whahine,	Ivahine.
<i>The head,</i>	Eupo,	Heaowpoho,	Eupo.
<i>The hair,</i>	Macauwe,	Heoo-oo,	Roourou.
<i>The ear,</i>	Terringa,	Hetaheyci,	Terrea.
<i>The forehead,</i>	Erai,	Heai,	Erai.
<i>The eyes,</i>	Mata,	Hemata,	Mata.
<i>The cheeks,</i>	Paparinga,	Hepapaeh,	Paparea.
<i>The nose,</i>	Ahewh,	Heeih,	Ahew.
<i>The mouth,</i>	Hangoutou,	Hegaowai,	Outou.
<i>The chin,</i>	Ecouwai,	Hakaoewai,	
<i>The arm,</i>	Haringaringu,		Rema.
<i>The finger,</i>	Maticara,	Hermaigawh,	Maneow.
<i>The belly,</i>	Ateraboo,		Oboo.
<i>The navel,</i>	Apeto,	Heeapeto,	Peto.
<i>Come hither,</i>	Haromai,	Heromai,	Harromai.
<i>Fish,</i>	Heica,	Heica,	Eyca.
<i>A lobster,</i>	Kooura,	Kooura,	Tooura.

<i>Cocos,</i>	Taro,	Taro,	Taro.
<i>Sweet potatoes,</i>	Cumala,	Cumala,	Cumala.
<i>Yams,</i>	Tuphwhe,	Tuphwhe,	Tuphwhe.
<i>Birds,</i>	Mannu,	Mannu,	Mannu.
<i>No,</i>	Kaoura,	Kaoura,	Oure.
<i>One,</i>	Tahai,		Tahai.
<i>Two,</i>	Rua,		Rua.
<i>Three,</i>	Torou,		Torou.
<i>Four,</i>	Ha,		Hea.
<i>Five,</i>	Rema,		Rema.
<i>Six,</i>	Ono,		Ono.
<i>Seven,</i>	Etu,		Hetu.
<i>Eight,</i>	Warou,		Warou.
<i>Nine,</i>	Iva,		Heva.
<i>Ten,</i>	Angahourou,		Ahourou.
<i>The teeth,</i>	Hennihew,	Heneaho,	Nihio.
<i>The wind,</i>	Mehow,		Mattai.
<i>A thief,</i>	Amootoo,		Teto.
<i>To examine,</i>	Mataketake,		Mataitai.
<i>To sing,</i>	Eheara,		Heiva.
<i>Bad,</i>	Keno,	Keno,	Eno.
<i>Trees,</i>	Eratou,	Eratou,	Eraou.
<i>Grandfather,</i>	Toubouna,	Toubouna,	Toubouna.
<i>What do you</i> <i>call this or</i> <i>that,</i>	Owy Terra,		Owy Terra.

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By this specimen, I think it appears to demonstration that the language of New Zealand and Otaheite is radically the same. The language of the northern and southern parts of New Zealand differs chiefly in the pronunciation, as the same English word is pronounced *gate* in Middlesex, and *geäte* in Yorkshire: and as the southern and northern words were not written down by the same person, one might pos-

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fibly use more letters to produce the same sound than the other.

I must also observe, that it is the genius of the language, especially in the southern parts, to put some article before a noun, as we do *the* or *a*; the articles used here were generally *he* or *ko*: it is also common here to add the word *öeia* after another word, as an iteration, especially if it is an answer to a question; as we say *yes indeed, to be sure, really, certainly*: this sometimes led our gentlemen into the formation of words of an enormous length, judging by the ear only, without being able to refer each sound into its signification. An example will make this perfectly understood.

In the Bay of Islands there is a remarkable one, called by the natives MATU ARO. One of our gentlemen having asked a native the name of it, he answered, with the particle, *Ke-matuario*; the gentleman hearing the sound imperfectly, repeated his question, and the Indian repeating his answer, added *öeia*, which made the word *Kematuarioöeia*; and thus it happened that in the log book I found *Matuario* transformed into *Cumettivarroweia*: and the same transformation, by the same means, might happen to an English word. Suppose a native of New Zealand at Hackney church, to enquire "what village is this?" the answer would be, "it is Hackney:" suppose the question to be repeated with an air of doubt and uncertainty, the answer might be "it is Hackney indeed," and the New Zealander, if he had the use of letters, would probably record, for the information of his countrymen, that during his residence among us he had visited a village called "Ityshakneeindede." The article used by the inhabitants of the South Sea islands, instead of *he* or *ko*, is *to* or *ta*, but the word *öeia* is common to both; and when we began to learn the language, it led us into many ridiculous mistakes.

But

But supposing these islands, and those in the South Seas, to have been peopled originally from the same country, it will perhaps for ever remain a doubt what country that is: we were, however, unanimously of opinion, that the people did not come from America, which lies to the eastward; and except there should appear to be a continent to the southward, in a moderate latitude, it will follow that they came from the westward.

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Thus far our navigation has certainly been unfavourable to the notion of a southern continent, for it has swept away at least three-fourths of the positions upon which it has been founded. The principal navigators, whose authority has been urged on this occasion, are Tasman, Juan Fernandes, Hermite, the commander of a Dutch squadron, Quiros, and Roggewein; and the track of the Endeavour has demonstrated that the land seen by these persons, and supposed to be part of a continent, is not so; it has also totally subverted the theoretical arguments which have been brought to prove that the existence of a southern continent is necessary to preserve an equilibrium between the two hemispheres; for upon this principle what we have already proved to be water, would render the southern hemisphere too light. In our rout to the northward, after doubling Cape Horn, when we were in the latitude of 40° , our longitude was 110° ; and in our return to the southward, after leaving Ulietea, when we were again in latitude 40° , our longitude was 145° ; the difference is 35° . When we were in latitude 30° the difference of longitude between the two tracks was 21° , which continued till we were as low as 20° ; but a single view of the chart will convey a better idea of this than the most minute description: yet as upon a view of the chart it will appear that there is a large space extending quite to the Tropics, which
neither

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neither we, nor any other navigators to our knowlege have explored, and as there will appear to be room enough for the Cape of a southern continent to extend northward into a low southern latitude, I shall give my reasons for believing there is no Cape, of any southern continent, to the northward of 40° south.

Notwithstanding what has been laid down by some geographers in their maps, and alleged by Mr. Dalrymple, with respect to Quiros, it is improbable in the highest degree that he saw to the southward of two islands, which he discovered in latitude 25 or 26, and which I suppose may lie between the longitude of 130° and 140° W. any signs of a continent, much less any thing which, in his opinion, was a known or indubitable sign of such land; for if he had, he would certainly have sailed southward in search of it, and if he had fought, supposing the signs to have been indubitable, he must have found: the discovery of a southern continent was the ultimate object of Quiros's voyage, and no man appears to have had it more at heart; so that if he was in latitude 26° S. and in longitude 146° W. where Mr. Dalrymple has placed the islands he discovered, it may fairly be inferred that no part of a southern continent extends to that latitude.


It will, I think, appear with equal evidence from the accounts of Roggewein's voyage, that between the longitudes of 130° and 150° W. there is no main land to the northward of 35° S. Mr. Pingre, in a treatise concerning the transit of Venus, which he went out to observe, has inserted an extract of Roggewein's voyage, and a map of the South Seas; and for reasons which may be seen at large in his work, supposes him, after leaving Easter Island, which he places in latitude $28 \frac{1}{2}^{\circ}$ S. longitude 123° W. to have steered S. W. as high as 34° S.

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34° S. and afterwards W. N. W.; and if this was indeed his rout, the proof that there is no main land to the northward of 35° S. is irrefragable. Mr. Dalrymple indeed supposes his rout to have been different, and that from Easter Isle he steered N. W. taking a course afterwards very little different from that of La Maire; but I think it is highly improbable that a man, who at his own request was sent to discover a southern continent, should take a course in which La Maire had already proved no continent could be found: it must however be confessed, that Roggewein's track cannot certainly be ascertained, because in the accounts that have been published of his voyage, neither longitudes nor latitudes are mentioned. As to myself I saw nothing that I thought a sign of land, in my rout either to the northward, southward, or westward, till a few days before I made the east coast of New Zealand: I did indeed frequently see large flocks of birds, but they were generally such as are found at a very remote distance from any coast; and it is also true that I frequently saw pieces of rock-weed, but I could not infer the vicinity of land from these, because I have been informed, upon indubitable authority, that a considerable quantity of the beans called *ox-eyes*, which are known to grow no where but in the West Indies, are every year thrown up on the coast of Ireland, which is not less than twelve hundred leagues distant.

Thus have I given my reasons for thinking that there is no continent to the northward of latitude 40° S.; of what may lie farther to the southward than 40° I can give no opinion; but I am so far from wishing to discourage any future attempt, finally to determine a question which has long been an object of attention to many nations; that now this voyage has reduced the only possible scite of a continent in the southern hemisphere, north of latitude 40°, to so small a space,

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space, I think it would be pity to leave that any longer unexamined, especially as the voyage may turn to good account, besides determining the principal question, if no continent should be found, by the discovery of new islands in the Tropical regions, of which there is probably a great number, that no European vessel has ever yet visited. Tupia from time to time gave us an account of about one hundred and thirty, and in a chart drawn by his own hand, he actually laid down no less than seventy-four.

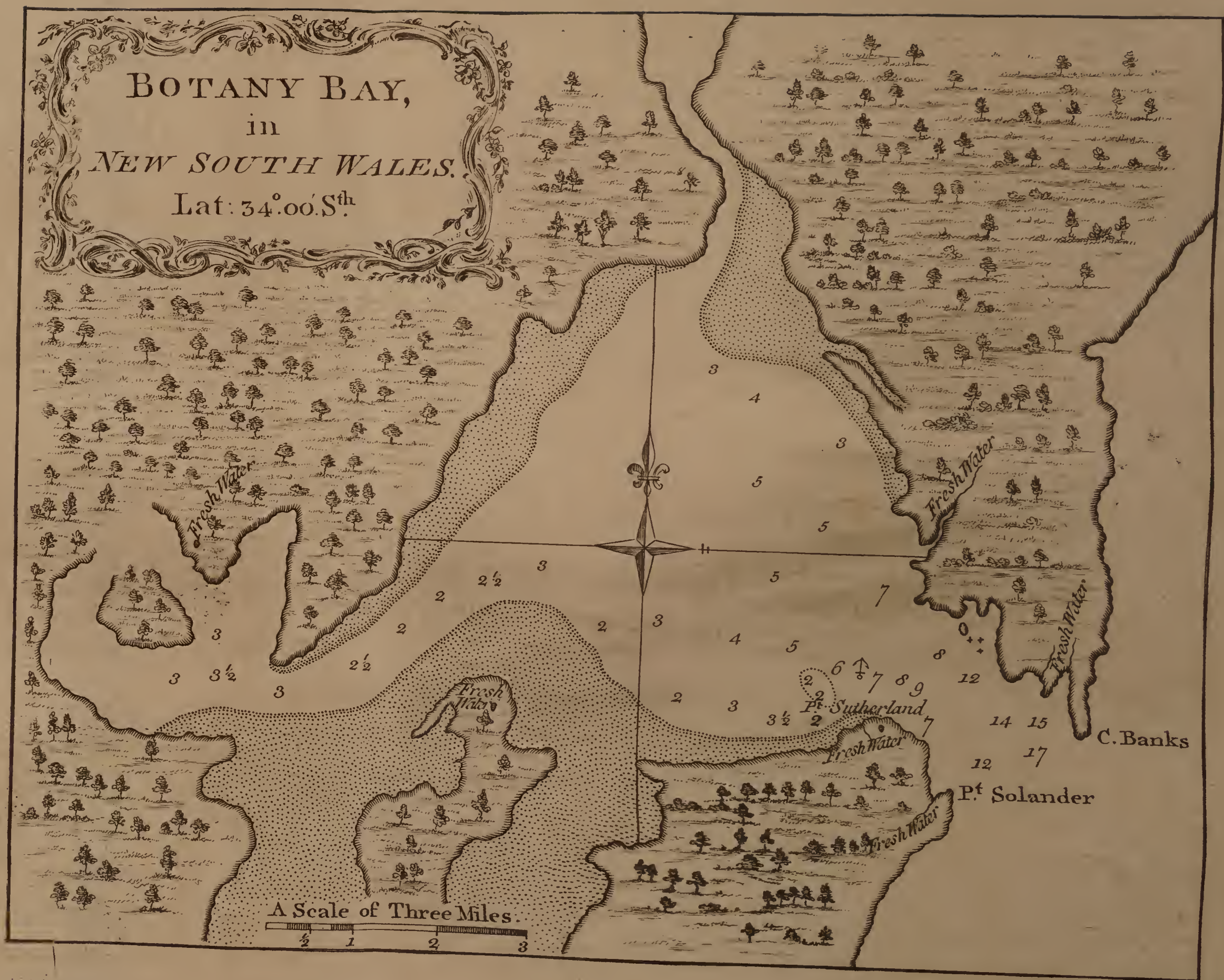
Scale of Leagues

A Chart of
NEW SOUTH WALES,
or the East Coast of
New-Holland.
Discovered and Explored
BY
Lieutenant J. Cook,
COMMANDER of his MAJESTY'S
BARK ENDEAVOUR,
in the Year
MDCCLXX.

Engraved by W. H. Church, Bartholomew Lane, Royal Exchange.

EXPLANATION.
* Rocks & Sands, some of which are dry at low Water,
and others always covered.
- Supposed Direction of such parts of the Coast and
Shoals, as were not seen.
+ Places where the Ship anchored.
The Picked Line shows the Ship's Track, and the
Figures annexed the depth of Water in Fathoms.





J. Gibson & T. Bowen Sculp.

A N
A C C O U N T
O F A
VOYAGE round the WORLD.

B O O K III.

C H A P. I.

The Run from New Zealand to Botany Bay, on the East Coast of New Holland, now called New South Wales; various Incidents that happened there; with some Account of the Country and its Inhabitants.

HAVING sailed from Cape Farewell, which lies in latitude $40^{\circ} 33'$ S. longitude 186° W. on Saturday the 31st of March 1770, we steered westward, with a fresh gale at N. N. E. and at noon on the 2^d of April, our latitude, by observation, was 40° , our longitude from Cape Farewell $2^{\circ} 31'$ W.

1770.
March.
Saturday 31.
April.
Monday 2.

In the morning of the 9th, being in latitude $38^{\circ} 29'$ S. we saw a tropic bird, which in so high a latitude is very uncommon.

Monday 9.

In the morning of the 10th, being in latitude $38^{\circ} 51'$ S. longitude $202^{\circ} 43'$ W. we found the variation, by the amplitude, to be $11^{\circ} 25'$ E. and by the azimuth $11^{\circ} 20'$.

Tuesday 10.

1770.
 April.
 Wednes. 11.

In the morning of the 11th, the variation was $13^{\circ} 48'$, which is two degrees and an half more than the day before, though I expected to have found it less.

Friday 13.

In the course of the 13th, being in latitude $39^{\circ} 23' S.$ longitude $204^{\circ} 2' W.$ I found the variation to be $12^{\circ} 27' E.$ and

Saturday 14.

in the morning of the 14th, it was $11^{\circ} 30'$; this day we also

Sunday 15.

saw some flying fish. On the 15th, we saw an egg bird and a gannet, and as these are birds that never go far from the land, we continued to sound all night, but had no ground

Monday 16.

with 130 fathom. At noon on the 16th, we were in latitude $39^{\circ} 45' S.$ longitude $208^{\circ} W.$ At about two o'clock the wind came about to the W.S.W. upon which we tacked and stood to the N.W.; soon after a small land-bird perched upon the rigging, but we had no ground with 120 fathom. At eight we wore and stood to the southward till twelve at night, and

Tuesday 17.

then wore and stood to the N.W. till four in the morning, when we again stood to the southward, having a fresh gale at W.S.W. with squalls and dark weather till nine, when the weather became clear, and there being little wind, we had an opportunity to take several observations of the sun and moon, the mean result of which gave $207^{\circ} 56' W.$ longitude: our latitude at noon was $39^{\circ} 36' S.$ We had now a hard gale from the southward, and a great sea from the same quarter, which obliged us to run under our fore-sail and mizen all night, during which we sounded every two hours, but had no ground with 120 fathom.

Wednes. 18.

In the morning of the 18th, we saw two Port Egmont hens, and a pintado bird, which are certain signs of approaching land, and indeed by our reckoning we could not be far from it, for our longitude was now one degree to the westward of the east side of Van Diemen's land, according to

the longitude laid down by Tasman, whom we could not suppose to have erred much in so short a run as from this land to New Zealand, and by our latitude we could not be above fifty or fifty-five leagues from the place whence he took his departure. All this day we had frequent squalls and a great swell. At one in the morning we brought to and founded, but had no ground with 130 fathom; at six we saw land extending from N. E. to W. at the distance of five or six leagues, having eighty fathom water with a fine sandy bottom.

1770.
April.
Wednes. 18.

Thursday 19.

We continued standing westward, with the wind at S. S. W. till eight, when we made all the sail we could, and bore away along the shore N. E. for the eastermost land in sight, being at this time in latitude $37^{\circ} 58'$ S. and longitude $210^{\circ} 39'$ W. The southermost point of land in sight, which bore from us W. $\frac{1}{4}$ S. I judged to lie in latitude 38° , longitude $211^{\circ} 7'$, and gave it the name of POINT HICKS, because Mr. Hicks, the First Lieutenant, was the first who discovered it. To the southward of this Point no land was to be seen, though it was very clear in that quarter, and by our longitude, compared with that of Tasman, not as it is laid down in the printed charts, but in the extracts from Tasman's journal, published by Rembrantse, the body of Van Diemen's land ought to have borne due south; and indeed, from the sudden falling of the sea after the wind abated, I had reason to think it did; yet as I did not see it, and as I found this coast trend N. E. and S. W. or rather more to the eastward, I cannot determine whether it joins to Van Diemen's land or not.

At noon, we were in latitude $37^{\circ} 50'$, longitude $210^{\circ} 29'$ W. The extreams of the land extended from N. W. to E. N. E. and a remarkable point bore N. 20 E. at the distance of about four

1770.
April.
Thursday 19.

leagues. This point rises in a round hillock, very much resembling the Ram Head at the entrance of Plymouth Sound, and therefore I called it by the same name. The variation by an azimuth, taken this morning, was $3^{\circ} 7' E.$; and what we had now seen of the land, appeared low and level: the sea shore was a white sand, but the country within was green and woody. About one o'clock, we saw three water spouts at once; two were between us and the shore, and the third at some distance, upon our larboard quarter: this phenomenon is so well known, that it is not necessary to give a particular description of it here.

At six o'clock in the evening, we shortened sail, and brought to for the night, having fifty-six fathom water, and a fine sandy bottom. The northernmost land in sight then bore N. by E. $\frac{1}{2}$ E. and a small island lying close to a point on the main bore W. distant two leagues. This point, which I called CAPE HOWE, may be known by the trending of the coast, which is north on the one side, and south west on the other; it may also be known by some round hills upon the main, just within it.

Friday 20.

We brought to for the night, and at four in the morning made sail along shore to the northward. At six, the northernmost land in sight bore N. N. W. and we were at this time about four leagues from the shore. At noon, we were in latitude $36^{\circ} 51' S.$ longitude $209^{\circ} 53' W.$ and about three leagues distant from the shore. The weather being clear, gave us a good view of the country, which has a very pleasing appearance: it is of a moderate height, diversified by hills and vallies, ridges and plains, interspersed with a few lawns of no great extent, but in general covered with wood: the ascent of the hills and ridges is gentle, and the summits are not high. We continued to sail along the shore

to

to the northward, with a southerly wind, and in the afternoon we saw smoke in several places, by which we knew the country to be inhabited. At six in the evening, we shortened sail, and founded: we found forty-four fathom water, with a clear sandy bottom, and stood on under an easy sail till twelve, when we brought to for the night, and had ninety fathom water.

1770.
April.
Friday 20.

At four in the morning, we made sail again, at the distance of about five leagues from the land, and at six, we were abreast of a high mountain, lying near the shore, which, on account of its figure, I called MOUNT DROMEDARY: under this mountain the shore forms a point, to which I gave the name of POINT DROMEDARY, and over it there is a peaked hillock. At this time, being in latitude $36^{\circ} 18' S.$ longitude $209^{\circ} 55' W.$ we found the variation to be $10^{\circ} 42' E.$

Saturday 21.

Between ten and eleven, Mr. Green and I took several observations of the sun and moon, the mean result of which gave $209^{\circ} 17' W.$ By an observation made the day before, our longitude was $210^{\circ} 9' W.$ from which, $20'$ being subtracted, there remains $209^{\circ} 49'$ the longitude of the ship this day at noon, the mean of which, with this day's observation, gives $209^{\circ} 33'$, by which I fix the longitude of this coast. At noon, our latitude was $35^{\circ} 49' S.$ Cape Dromedary bore S. $30 W.$ at the distance of twelve leagues, and an open bay, in which were three or four small islands, bore N. W. by W. at the distance of five or six leagues. This bay seemed to afford but little shelter from the sea winds, and yet it is the only place where there appeared a probability of finding anchorage upon the whole coast. We continued to steer along the shore N. by E. and N. N. E. at the distance of about three leagues, and saw smoke in many places near the

1770.
April.

Saturday 21.

the beach. At five in the evening, we were abreast of a point of land which rose in a perpendicular cliff, and which, for that reason, I called POINT UPRIGHT. Our latitude was $35^{\circ} 35'$ S. when this Point bore from us due west, distant about two leagues: in this situation, we had about thirty-one fathom water with a sandy bottom. At six in the evening, the wind falling, we hauled off E. N. E. and at this time the northermost land in sight bore N. by E. $\frac{1}{4}$ E. At midnight, being in seventy fathom water, we brought to till four in the morning, when we made sail in for the land; but at day-break, found our situation nearly the same as it had been at five the evening before, by which it was apparent that we had been driven about three leagues to the southward, by a tide or current, during the night. After this we steered along the shore N. N. E. with a gentle breeze at S. W. and were so near the land as to distinguish several of the natives upon the beach, who appeared to be of a black, or very dark colour. At noon, our latitude, by observation, was $35^{\circ} 27'$ S. and longitude $209^{\circ} 23'$ W. Cape Dromedary bore S. 28° W. distant nineteen leagues, a remarkable peaked hill, which resembled a square dove-house, with a dome at the top, and which for that reason I called the PIGEON HOUSE, bore N. $32^{\circ} 30'$ W. and a small low island, which lay close under the shore, bore N. W. distant about two or three leagues. When I first discovered this island, in the morning, I was in hopes, from its appearance, that I should have found shelter for the ship behind it, but when we came near it, it did not promise security even for the landing of a boat. I should however have attempted to send a boat on shore, if the wind had not veered to that direction, with a large hollow sea rolling in upon the land from the S. E. which indeed had been the case ever since we had been upon it. The coast still continued to be of a moderate height, forming alternately

nately

Sunday 22.

nately rocky points and sandy beaches; but within, between Mount Dromedary and the Pigeon House, we saw high mountains, which, except two, are covered with wood: these two lie inland behind the Pigeon House, and are remarkably flat at the top, with steep rocky cliffs all round them, as far as we could see. The trees which almost everywhere clothe this country, appear to be large and lofty. This day the variation was found to be $9^{\circ} 50'$ E. and for the two last days, the latitude, by observation, was twelve or fourteen miles to the southward of the ship's account, which could have been the effect of nothing but a current setting in that direction. About four in the afternoon, being near five leagues from the land, we tacked and stood off S. E. and E. and the wind having veered in the night, from E. to N. E. and N. we tacked about four in the morning, and stood in, being then about nine or ten leagues from the shore. At eight, the wind began to die away, and soon after it was calm. At noon, our latitude, by observation, was $35^{\circ} 38'$, and our distance from the land about six leagues. Cape Dromedary bore S. 37° W. distant seventeen leagues, and the Pigeon House N. 40° W.: in this situation we had seventy-four fathom water. In the afternoon, we had variable light airs and calms, till six in the evening, when a breeze sprung up at N. by W.: at this time, being about four or five leagues from the shore, we had seventy fathom water. The Pigeon House bore N. 45° W. Mount Dromedary S. 30° W. and the northermost land in sight N. 19° E.

1770.
April.

Sunday 22.

Monday 23.

We stood to the north east till noon the next day, with a gentle breeze at N. W. and then we tacked and stood westward. At this time, our latitude, by observation, was $35^{\circ} 10'$ S. and longitude $208^{\circ} 51'$ W. A point of land which I had discovered on St. George's day, and which therefore I called CAPE GEORGE, bore W. distant nineteen miles, and the

Tuesday 24.

Pigeon

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April.
Tuesday 24.

Pigeon House, (the latitude and longitude of which I found to be $35^{\circ} 19' S.$ and $209^{\circ} 42' W.$) $S. 75 W.$ In the morning, we had found the variation, by amplitude, to be $7^{\circ} 50' E.$ and by several azimuths $7^{\circ} 54' E.$ We had a fresh breeze at N. W. from noon till three; it then came to the west, when we tacked and stood to the northward. At five in the evening, being about five or six leagues from the shore, with the Pigeon House bearing W. S. W. distant about nine leagues, we had eighty-six fathom water; and at eight, having thunder and lightning, with heavy squalls, we brought to in 120 fathom.

Wednes. 25.

At three in the morning, we made sail again to the northward, having the advantage of a fresh gale at S. W. At noon, we were about three or four leagues from the shore, and in latitude $34^{\circ} 22' S.$ longitude $208^{\circ} 36' W.$ In the course of this day's run from the preceding noon, which was forty-five miles north east, we saw smoke in several places near the beach. About two leagues to the northward of Cape George, the shore seemed to form a bay, which promised shelter from the north east winds, but as the wind was with us, it was not in my power to look into it without beating up, which would have cost me more time than I was willing to spare. The north point of this bay, on account of its figure, I named LONG NOSE; its latitude is $35^{\circ} 6'$, and about eight leagues north of it there lies a point, which, from the colour of the land about it, I called RED POINT: its latitude is $34^{\circ} 29'$, and longitude $208^{\circ} 45' W.$ To the north west of Red Point, and a little way inland, stands a round hill, the top of which looks like the crown of a hat. In the afternoon of this day, we had a light breeze at N. N. W. till five in the evening; when it fell calm: at this time, we were between three and four leagues from the shore, and had forty-eight fathom water: the variation by azimuth was $8^{\circ} 48' E.$ and

and the extremities of this land were from N. E. by N. to S. W. by S. Before it was dark, we saw smoke in several places along the shore, and a fire two or three times afterwards. During the night we lay becalmed, driving in before the sea till one in the morning, when we got a breeze from the land, with which we steered N. E. being then in thirty-eight fathom. At noon, it veered to N. E. by N. and we were then in latitude $34^{\circ} 10'$ S. longitude $208^{\circ} 27'$ W.: the land was distant about five leagues, and extended from S. 37° W. to N. $\frac{1}{2}^{\circ}$ E. In this latitude, there are some white cliffs, which rise perpendicularly from the sea to a considerable height. We stood off the shore till two o'clock, and then tacked and stood in till six, when we were within four or five miles of it, and at that distance had fifty fathom water. The extremities of the land bore from S. 28° W. to N. $25^{\circ} 30'$ E. We now tacked and stood off till twelve, then tacked and stood in again till four in the morning, when we made a trip off till daylight; and during all this time we lost ground, owing to the variableness of the winds. We continued at the distance of between four and five miles from the shore, till the afternoon, when we came within two miles, and I then hoisted out the pinnace and yawl to attempt a landing, but the pinnace proved to be so leaky that I was obliged to hoist her in again. At this time we saw several of the natives walking briskly along the shore, four of whom carried a small canoe upon their shoulders: we flattered ourselves that they were going to put her into the water, and come off to the ship, but finding ourselves disappointed, I determined to go on shore in the yawl, with as many as it would carry: I embarked therefore, with only Mr. Banks, Dr. Solander, Tupia, and four rowers: we pulled for that part of the shore where the Indians appeared, near which four small canoes were lying at the water's edge.

1770.
April.
Wednesd. 25.

Thursday 26.

Friday 27.

1770.
April.

Friday 27.

The Indians sat down upon the rocks, and seemed to wait for our landing; but to our great regret, when we came within about a quarter of a mile, they ran away into the woods: we determined however to go ashore, and endeavour to procure an interview, but in this we were again disappointed, for we found so great a surf beating upon every part of the beach, that landing with our little boat was altogether impracticable: we were therefore obliged to be content with gazing at such objects as presented themselves from the water: the canoes, upon a near view, seemed very much to resemble those of the smaller fort at New Zealand. We observed, that among the trees on shore, which were not very large, there was no underwood; and could distinguish that many of them were of the palm kind, and some of them cabbage trees: after many a wishful look we were obliged to return, with our curiosity rather excited than satisfied, and about five in the evening got on board the ship. About this time it fell calm, and our situation was by no means agreeable: we were now not more than a mile and a half from the shore, and within some breakers, which lay to the southward; but happily a light breeze came off the land, and carried us out of danger: with this breeze we stood to the northward, and at day-break we discovered a bay, which seemed to be well sheltered from all winds, and into which therefore I determined to go with the ship. The pinnace being repaired, I sent her, with the Master, to sound the entrance, while I kept turning up, having the wind right out. At noon, the mouth of the bay bore N. N. W. distant about a mile, and seeing a smoke on the shore, we directed our glasses to the spot, and soon discovered ten people, who, upon our nearer approach, left their fire, and retired to a little eminence, whence they could conveniently observe our motions. Soon after two canoes, each having two men on board,

Saturday 28.

1770.
April.
Saturday 28.

board, came to the shore just under the eminence, and the men joined the rest on the top of it. The pinnacle, which had been sent ahead to sound, now approached the place, upon which all the Indians retired farther up the hill, except one, who hid himself among some rocks near the landing-place. As the pinnacle proceeded along the shore, most of the people took the same route, and kept abreast of her at a distance; when she came back, the master told us, that in a cove a little within the harbour, some of them had come down to the beach, and invited him to land by many signs and words of which he knew not the meaning; but that all of them were armed with long pikes, and a wooden weapon shaped somewhat like a cimeter. The Indians who had not followed the boat, seeing the ship approach, used many threatening gestures, and brandished their weapons; particularly two, who made a very singular appearance, for their faces seemed to have been dusted with a white powder, and their bodies painted with broad streaks of the same colour, which passing obliquely over their breasts and backs, looked not unlike the cross-belts worn by our soldiers; the same kind of streaks were also drawn round their legs and thighs like broad garters: each of these men held in his hand the weapon that had been described to us as like a cimeter, which appeared to be about two feet and a half long, and they seemed to talk to each other with great earnestness.

We continued to stand into the bay, and early in the afternoon anchored under the south shore, about two miles within the entrance, in six fathom water, the south point bearing S. E. and the north point East. As we came in we saw, on both points of the bay, a few huts, and several of the natives, men, women, and children. Under the south head

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April.

Saturday 28.

we saw four small canoes, with each one man on board, who were very busily employed in striking fish with a long pike or spear: they ventured almost into the surf, and were so intent upon what they were doing, that although the ship passed within a quarter of a mile of them, they scarcely turned their eyes towards her; possibly being deafened by the surf, and their attention wholly fixed upon their business or sport, they neither saw nor heard her go past them.

The place where the ship had anchored was abreast of a small village, consisting of about six or eight houses; and while we were preparing to hoist out the boat, we saw an old woman, followed by three children, come out of the wood; she was loaded with fire-wood, and each of the children had also its little burden: when she came to the houses three more children, younger than the others, came out to meet her: she often looked at the ship, but expressed neither fear nor surprise: in a short time she kindled a fire, and the four canoes came in from fishing. The men landed, and having hauled up their boats, began to dress their dinner, to all appearance wholly unconcerned about us, though we were within half a mile of them. We thought it remarkable that of all the people we had yet seen, not one had the least appearance of clothing, the old woman herself being destitute even of a fig-leaf.

After dinner the boats were manned, and we set out from the ship, having Tupia of our party. We intended to land where we saw the people, and began to hope that as they had so little regarded the ship's coming into the bay, they would as little regard our coming on shore: in this, however, we were disappointed; for as soon as we approached the rocks, two of the men came down upon them to dispute our landing, and the rest ran away. Each of the two
champions

1770.
April.

Saturday 28.

champions was armed with a lance about ten feet long, and a short stick which he seemed to handle as if it was a machine to assist him in managing or throwing the lance: they called to us in a very loud tone, and in a harsh dissonant language, of which neither we nor Tupia understood a single word: they brandished their weapons, and seemed resolved to defend their coast to the uttermost, though they were but two, and we were forty. I could not but admire their courage, and being very unwilling that hostilities should commence with such inequality of force between us, I ordered the boat to lie upon her oars: we then parlied by signs for about a quarter of an hour, and to bespeak their good-will, I threw them nails, beads, and other trifles, which they took up and seemed to be well pleased with. I then made signs that I wanted water, and, by all the means that I could devise, endeavoured to convince them that we would do them no harm: they now waved to us, and I was willing to interpret it as an invitation; but upon our putting the boat in, they came again to oppose us. One appeared to be a youth about nineteen or twenty, and the other a man of middle age: as I had now no other resource I fired a musquet between them. Upon the report, the youngest dropped a bundle of lances upon the rock, but recollecting himself in an instant he snatched them up again with great haste: a stone was then thrown at us, upon which I ordered a musquet to be fired with small shot, which struck the eldest upon the legs, and he immediately ran to one of the houses, which was distant about an hundred yards: I now hoped that our contest was over, and we immediately landed; but we had scarcely left the boat when he returned, and we then perceived that he had left the rock only to fetch a shield or target for his defence. As soon as he came up, he threw a lance at us, and his comrade another; they fell where we stood.

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Saturday 28.

stood thickest, but happily hurt nobody. A third musquet with small shot was then fired at them, upon which one of them threw another lance, and both immediately ran away: if we had pursued, we might probably have taken one of them; but Mr. Banks suggesting that the lances might be poisoned, I thought it not prudent to venture into the woods. We repaired immediately to the huts, in one of which we found the children, who had hidden themselves behind a shield and some bark; we peeped at them, but left them in their retreat, without their knowing that they had been discovered, and we threw into the house when we went away some beads, ribbons, pieces of cloth, and other presents, which we hoped would procure us the good-will of the inhabitants when they should return; but the lances which we found lying about, we took away with us, to the number of about fifty: they were from six to fifteen feet long, and all of them had four prongs in the manner of a fish-gig, each of which was pointed with fish-bone, and very sharp: we observed that they were smeared with a viscous substance of a green colour, which favoured the opinion of their being poisoned, though we afterwards discovered that it was a mistake: they appeared, by the sea-weed that we found sticking to them, to have been used in striking fish. Upon examining the canoes that lay upon the beach, we found them to be the worst we had ever seen: they were between twelve and fourteen feet long, and made of the bark of a tree in one piece, which was drawn together and tied up at each end, the middle being kept open by sticks which were placed across them from gunwale to gunwale as thwarts. We then searched for fresh water, but found none, except in a small hole which had been dug in the sand.

Having reimbarked in our boat, we deposited our lances on board the ship, and then went over to the north point of
the

the bay, where we had seen several of the inhabitants when we were entering it, but which we now found totally deserted. Here however we found fresh water, which trickled down from the top of the rocks, and stood in pools among the hollows at the bottom; but it was situated so as not to be procured for our use without difficulty.

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Saturday 28.

In the morning, therefore, I sent a party of men to that part of the shore where we first landed, with orders to dig holes in the sand where the water might gather; but going ashore myself with the Gentlemen soon afterwards, we found, upon a more diligent search, a small stream, more than sufficient for our purpose.

Sunday 29.

Upon visiting the hut where we had seen the children, we were greatly mortified to find that the beads and ribbons which we had left there the night before, had not been moved from their places, and that not an Indian was to be seen.

Having sent some empty water-casks on shore, and left a party of men to cut wood, I went myself in the pinnace to sound, and examine the bay; during my excursion I saw several of the natives, but they all fled at my approach. In one of the places where I landed I found several small fires, and fresh muscles broiling upon them; here also I found some of the largest oyster-shells I had ever seen.

As soon as the wooders and waterers came on board to dinner, ten or twelve of the natives came down to the place, and looked with great attention and curiosity at the casks, but did not touch them: they took away however the canoes which lay near the landing-place, and again disappeared. In the afternoon, when our people were again ashore, sixteen or eighteen Indians, all armed, came boldly within about an hundred yards of them, and then stopped: two of

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Sunday 29.

them advanced somewhat nearer; and Mr. Hicks, who commanded the party on shore, with another, advanced to meet them, holding out presents to them as he approached, and expressing kindness and amity by every sign he could think of, but all without effect; for before he could get up with them they retired, and it would have answered no purpose to pursue. In the evening, I went with Mr. Banks and Dr. Solander to a sandy cove on the north side of the bay, where, in three or four hauls with the seine, we took above three hundred weight of fish, which was equally divided among the ship's company.

Monday 30.

The next morning, before day-break, the Indians came down to the houses that were abreast of the ship, and were heard frequently to shout very loud. As soon as it was light, they were seen walking along the beach; and soon after they retired to the woods, where, at the distance of about a mile from the shore, they kindled several fires.

Our people went ashore as usual, and with them Mr. Banks and Dr. Solander, who, in search of plants, repaired to the woods. Our men, who were employed in cutting grass, being the farthest removed from the main body of the people, a company of fourteen or fifteen Indians advanced towards them, having sticks in their hands, which, according to the report of the Serjeant of the marines, shone like a musquet. The grass-cutters, upon seeing them approach, drew together, and repaired to the main body. The Indians, being encouraged by this appearance of a flight, pursued them; they stopped however when they were within about a furlong of them, and after shouting several times went back into the woods. In the evening they came again in the same manner, stopped at the same distance, shouted and retired. I followed them myself, alone and unarmed, for a

considerable way along the shore, but I could not prevail upon them to stop.

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Monday 30.

This day Mr. Green took the sun's meridian altitude a little within the south entrance of the bay, which gave the latitude 34° S. the variation of the needle was $11^{\circ} 3'$ E.

Early the next morning, the body of Forby Sutherland, one of our seamen, who died the evening before, was buried near the watering-place; and from this incident I called the south point of this bay SUTHERLAND POINT. This day we resolved to make an excursion into the country. Mr. Banks, Dr. Solander, myself, and seven others, properly accoutred for the expedition, set out, and repaired first to the huts, near the watering-place, whither some of the natives continued every day to resort; and though the little presents which we had left there before had not yet been taken away, we left others of somewhat more value, consisting of cloth, looking-glasses, combs, and beads, and then went up into the country. We found the soil to be either swamp or light sand, and the face of the country finely diversified by wood and lawn. The trees are tall, straight, and without underwood, standing at such a distance from each other that the whole country, at least where the swamps do not render it incapable of cultivation, might be cultivated without cutting down one of them: between the trees the ground is covered with grass, of which there is great abundance, growing in tufts about as big as can well be grasped in the hand, which stand very close to each other. We saw many houses of the inhabitants, and places where they had slept upon the grass without any shelter; but we saw only one of the people, who the moment he discovered us ran away. At all these places we left presents, hoping that at length they might produce confidence and good-will. We

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had a transient and imperfect view of a quadruped about as big as a rabbit: Mr. Banks's greyhound, which was with us, got sight of it, and would probably have caught it, but the moment he set off he lamed himself, against a stump which lay concealed in the long grass. We afterwards saw the dung of an animal which fed upon grass, and which we judged could not be less than a deer; and the footsteps of another, which was clawed like a dog; and seemed to be about as big as a wolf: we also tracked a small animal, whose foot resembled that of a polcat or weasel. The trees over our head abounded with birds of various kinds, among which were many of exquisite beauty, particularly loriquets and cockatoos, which flew in flocks of several scores together. We found some wood which had been felled by the natives with a blunt instrument, and some that had been barked. The trees were not of many species; among others there was a large one which yielded a gum not unlike the *Sanguis draconis*; and in some of them steps had been cut at about three feet distance from each other, for the convenience of climbing them.

From this excursion we returned between three and four o'clock, and having dined on board, we went ashore again at the watering-place, where a party of men were filling casks. Mr. Gore, the Second Lieutenant, had been sent out in the morning with a boat to dredge for oysters at the head of the bay; when he had performed this service, he went ashore, and having taken a midshipman with him, and sent the boat away, set out to join the waterers by land. In his way he fell in with a body of two and twenty Indians, who followed him, and were often not more than twenty yards distant; when Mr. Gore perceived them so near, he stopped, and faced about, upon which they stopped also; and when he went

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on again, continued their pursuit: they did not however attack him, though they were all armed with lances, and he and the midshipman got in safety to the watering-place. The Indians, who had slackened their pursuit when they came in sight of the main body of our people, halted at about the distance of a quarter of a mile, where they stood still. Mr. Monkhouse and two or three of the waterers took it in their head to march up to them; but seeing the Indians keep their ground till they came pretty near them, they were seized with a sudden fear very common to the rash and fool-hardy, and made a hasty retreat: this step, which increased the danger that it was taken to avoid, encouraged the Indians, and four of them running forward discharged their lances at the fugitives, with such force that, flying no less than forty yards, they went beyond them. As the Indians did not pursue, our people, recovering their spirits, stopped to collect the lances when they came up to the place where they lay; upon which the Indians, in their turn, began to retire. Just at this time I came up, with Mr. Banks, Dr. Solander, and Tupia; and being desirous to convince the Indians that we were neither afraid of them, nor intended them any mischief, we advanced towards them, making signs of expostulation and entreaty, but they could not be persuaded to wait till we could come up. Mr. Gore told us, that he had seen some of them up the bay, who had invited him by signs to come on shore, which he, certainly with great prudence, declined.

The morning of the next day was so rainy, that we were all glad to stay on board. In the afternoon, however, it cleared up, and we made another excursion along the sea-coast to the southward: we went ashore, and Mr. Banks and Dr. Solander gathered many plants; but besides these we saw nothing worthy of notice. At our first entering the

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woods,

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woods, we met with three of the natives, who instantly ran away: more of them were seen by some of the people, but they all disappeared, with great precipitation, as soon as they found that they were discovered. By the boldness of these people at our first landing, and the terror that seized them at the sight of us afterwards, it appears that they were sufficiently intimidated by our fire-arms: not that we had any reason to think the people much hurt by the small-shot which we were obliged to fire at them, when they attacked us at our coming out of the boat; but they had probably seen the effects of them, from their lurking places, upon the birds that we had shot. Tupia, who was now become a good marksman, frequently strayed from us to shoot parrots; and he had told us, that while he was thus employed, he had once met with nine Indians, who, as soon as they perceived he saw them, ran from him, in great confusion and terror.

Thursday 3.

The next day, twelve canoes, in each of which was a single Indian, came towards the watering-place, and were within half a mile of it a considerable time: they were employed in striking fish, upon which, like others that we had seen before, they were so intent that they seemed to regard nothing else. It happened, however, that a party of our people were out a shooting near the place, and one of the men, whose curiosity might at length perhaps be roused by the report of the fowling-pieces, was observed by Mr. Banks to haul up his canoe upon the beach, and go towards the shooting party: in something more than a quarter of an hour he returned, launched his canoe, and went off in her to his companions. This incident makes it probable that the natives acquired a knowledge of the destructive power of our fire-arms, when we knew nothing of the matter; for this man
was

was not seen by any of the party whose operations he had reconnoitred.

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Thursday 3.

While Mr. Banks was gathering plants near the watering-place, I went with Dr. Solander and Mr. Monkhouse to the head of the bay, that I might examine that part of the country, and make farther attempts to form some connection with the natives. In our way we met with eleven or twelve small canoes, with each a man in it, probably the same that were afterwards abreast of the shore; who all made into shoal water upon our approach. We met other Indians on shore the first time we landed, who instantly took to their canoes, and paddled away. We went up the country to some distance, and found the face of it nearly the same with that which has been described already, but the soil was much richer; for instead of sand, I found a deep black mould, which I thought very fit for the production of grain of any kind. In the woods we found a tree which bore fruit that in colour and shape resembled a cherry; the juice had an agreeable tartness, though but little flavour. We found also interspersed some of the finest meadows in the world: some places however were rocky, but these were comparatively few: the stone is sandy, and might be used with advantage for building. When we returned to the boat, we saw some smoke upon another part of the coast, and went thither in hopes of meeting with the people, but at our approach, these also ran away. We found six small canoes, and six fires very near the beach, with some muscles roasting upon them, and a few oysters lying near: by this we judged that there had been one man in each canoe, who having picked up some shell-fish were come ashore to eat it, and that each had made his separate fire for that purpose: we tasted of their cheer, and left them in return some strings of beads, and other things which

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which we thought would please them. At the foot of a tree in this place we found a small well of fresh water, supplied by a spring; and the day being now far spent, we returned to the ship. In the evening, Mr. Banks made a little excursion with his gun, and found such a number of quails, resembling those in England, that he might have shot as many as he pleased; but his object was variety, and not number.

Friday 4.

The next morning, as the wind would not permit me to sail, I sent out several parties into the country to try again whether some intercourse could not be established with the natives. A midshipman who belonged to one of these parties, having straggled a long way from his companions, met with a very old man and woman, and some little children; they were sitting under a tree by the water side, and neither party saw the other till they were close together: the Indians showed signs of fear, but did not attempt to run away. The man happened to have nothing to give them but a parrot that he had shot; this he offered, but they refused to accept it, withdrawing themselves from his hand either through fear or aversion. His stay with them was but short, for he saw several canoes near the beach fishing, and being alone, he feared they might come ashore and attack him: he said, that these people were very dark coloured, but not black; that the man and woman appeared to be very old, being both grey-headed; that the hair of the man's head was bushy, and his beard long and rough; that the woman's hair was cropped short, and both of them were stark naked. Mr. Monkhouse the Surgeon, and one of the men, who were with another party near the watering-place, also strayed from their companions, and as they were coming out of a thicket observed six Indians standing together, at the distance of about fifty yards. One of them pronounced a word very loud,

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loud, which was supposed to be a signal, for a lance was immediately thrown at him out of the wood, which very narrowly missed him. When the Indians saw that the weapon had not taken effect, they ran away with the greatest precipitation; but on turning about towards the place whence the lance had been thrown, he saw a young Indian, whom he judged to be about nineteen or twenty years old, come down from a tree, and he also ran away with such speed as made it hopeless to follow him. Mr. Monkhouse was of opinion that he had been watched by these Indians in his passage through the thicket, and that the youth had been stationed in the tree, to discharge the lance at him, upon a signal as he should come by; but however this be, there could be no doubt but that he was the person who threw the lance.

In the afternoon, I went myself with a party over to the north shore, and while some of our people were hauling the seine, we made an excursion a few miles into the country, proceeding afterwards in the direction of the coast. We found this place without wood, and somewhat resembling our moors in England; the surface of the ground, however, was covered with a thin brush of plants, about as high as the knees: the hills near the coast are low, but others rise behind them, increasing by a gradual ascent to a considerable distance, with marshes and morasses between. When we returned to the boat, we found that our people had caught with the seine a great number of small fish, which are well known in the West Indies, and which our sailors call Leather jackets, because their skin is remarkably thick. I had sent the Second Lieutenant out in the yawl a striking, and when we got back to the ship, we found that he also had been very successful. He had observed that the large sting-rays, of which

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Friday 4.

which there is great plenty in the bay, followed the flowing tide into very shallow water; he therefore took the opportunity of flood, and struck several in not more than two or three feet water: one of them weighed no less than two hundred and forty pounds after his entrails were taken out.

Saturday 5.

The next morning, as the wind still continued northerly I sent out the yawl again, and the people struck one still larger, for when his entrails were taken out he weighed three hundred and thirty-six pounds.

The great quantity of plants which Mr. Banks and Dr. Solander collected in this place induced me to give it the name of BOTANY BAY. It is situated in the latitude of 34° S., longitude $208^{\circ} 37'$ W. It is capacious, safe, and convenient, and may be known by the land on the sea-coast, which is nearly level, and of a moderate height; in general higher than it is farther inland, with steep rocky cliffs next the sea, which have the appearance of a long island lying close under the shore. The harbour lies about the middle of this land, and in approaching it from the southward, is discovered before the ship comes abreast of it; but from the northward it is not discovered so soon: the entrance is a little more than a quarter of a mile broad, and lies in W.N.W. To sail into it the southern shore should be kept on board, till the ship is within a small bare island, which lies close under the north shore; within this island the deepest water on that side is seven fathom, shallowing to five a good way up. At a considerable distance from the south shore there is a shoal, reaching from the inner south point quite to the head of the harbour; but over towards the north and north west shore there is a channel of twelve or fourteen feet at low water, for three or four leagues, up to a place where there is three or four fathom, but here I found very little fresh water. We

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anchored near the south shore, about a mile within the entrance, for the convenience of sailing with a southerly wind, and because I thought it the best situation for watering; but I afterwards found a very fine stream on the north shore, in the first sandy cove within the island, before which a ship might lie almost land-locked, and procure wood as well as water in great abundance. Wood indeed is every where plenty, but I saw only two kinds which may be considered as timber. These trees are as large, or larger than the English oak, and one of them has not a very different appearance: this is the same that yields the reddish gum like *sanguis draconis*, and the wood is heavy, hard, and dark-coloured, like *lignum vitæ*: the other grows tall and strait, something like the pine; and the wood of this, which has some resemblance to the live oak of America, is also hard and heavy. There are a few shrubs, and several kinds of the palm; mangroves also grow in great plenty near the head of the bay. The country in general is level, low, and woody, as far as we could see. The woods, as I have before observed, abound with birds of exquisite beauty, particularly of the parrot kind; we found also crows here, exactly the same with those in England. About the head of the harbour, where there are large flats of sand and mud, there is great plenty of water-fowl, most of which were altogether unknown to us: one of the most remarkable was black and white, much larger than a swan, and in shape somewhat resembling a pelican. On these banks of sand and mud there are great quantities of oysters, muscles, cockles, and other shell-fish, which seem to be the principal subsistence of the inhabitants, who go into shoal water with their little canoes, and pick them out with their hands. We did not observe that they eat any of them raw, nor do they always go on shore to dress them, for they have frequently fires in their canoes for that purpose.

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pose. They do not however subsist wholly upon this food, for they catch a variety of other fish, some of which they strike with gigs, and some they take with hook and line. All the inhabitants that we saw were stark naked: they did not appear to be numerous, nor to live in societies, but like other animals were scattered about along the coast, and in the woods. Of their manner of life, however, we could know but little, as we were never able to form the least connection with them: after the first contest at our landing, they would never come near enough to parley; nor did they touch a single article of all that we had left at their huts, and the places they frequented, on purpose for them to take away.

During my stay in this harbour, I caused the English colours to be displayed on shore every day, and the ship's name, and the date of the year, to be inscribed upon one of the trees near the watering-place.

It is high-water here at the full and change of the moon about eight o'clock, and the tide rises and falls perpendicularly between four and five feet.

C H A P. IV.

The Range from Botany Bay to Trinity Bay; with a farther Account of the Country, its Inhabitants, and Productions.

AT day-break, on Sunday the 6th of May 1770, we set sail from Botany Bay, with a light breeze at N. W. which soon after coming to the southward, we steered along the shore N. N. E.; and at noon, our latitude, by observation, was $33^{\circ} 50'$ S. At this time we were between two and three miles distant from the land, and abreast of a bay, or harbour, in which there appeared to be good anchorage, and which I called PORT JACKSON. This harbour lies three leagues to the northward of Botany Bay: the variation, by several azimuths, appeared to be 8° E. At sun-set, the northernmost land in sight bore N. 26° E. and some broken land, that seemed to form a bay, bore N. 40° W. distant four leagues. This bay, which lies in latitude $33^{\circ} 42'$, I called BROKEN BAY. We steered along the shore N. N. E. all night, at the distance of about three leagues from the land, having from thirty-two to thirty-six fathom water, with a hard sandy bottom.

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Sunday 6.

Soon after sun-rise on the 7th, I took several azimuths, with four needles belonging to the azimuth compass, the mean result of which gave the variation $7^{\circ} 56'$ E. At noon, our latitude, by observation, was $33^{\circ} 22'$ S.: we were about three leagues from the shore; the northernmost land in sight bore N. 19° E. and some lands which projected in three bluff points, and which, for that reason, I called CAPE THREE

Monday 7.

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Monday 7.

POINTS, bore S. W. distant five leagues. Our longitude from Botany Bay was 19° E. In the afternoon, we saw smoke in several places upon the shore, and in the evening, found the variation to be $8^{\circ} 25'$ E. At this time we were between two and three miles from the shore, in twenty-eight fathom; and at noon the next day, we had not advanced one step to the northward. We stood off shore, with the winds northerly, till twelve at night, and at the distance of about five leagues, had seventy fathom; at the distance of six leagues we had eighty fathom, which is the extent of the soundings; for at the distance of ten leagues, we had no ground with 150 fathom.

Tuesday 8.

Thursday 10.

The wind continuing northerly, till the morning of the 10th, we continued to stand in and off the shore, with very little change of situation in other respects; but a gale then springing up at S. W. we made the best of our way along the shore to the northward. At sun-rise, our latitude was $33^{\circ} 2'$ S. and the variation 8° E. At nine in the forenoon, we passed a remarkable hill, which stood a little way inland, and somewhat resembled the crown of a hat: and at noon, our latitude, by observation, was $32^{\circ} 53'$ S. and our longitude 208° W. We were about two leagues distant from the land, which extended from N. 41° E. to S. 41° W., and a small round rock, or island, which lay close under the land, bore S. 82° W. distant between three and four leagues. At four in the afternoon, we passed, at the distance of about a mile, a low rocky point, which I called POINT STEPHENS, on the north side of which is an inlet, which I called PORT STEPHENS: this inlet appeared to me, from the mast head, to be sheltered from all winds. It lies in latitude $32^{\circ} 40'$, longitude $207^{\circ} 51'$, and at the entrance are three small islands, two of which are high; and on the main near the shore are some high round hills, which at a distance appear like islands. In passing

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Thursday 10.

Friday 11.

passing this bay, at the distance of two or three miles from the shore, our soundings were from thirty-three to twenty-seven fathom, from which I conjectured that there must be a sufficient depth of water within it. At a little distance within land, we saw smoke in several places; and at half an hour past five, the northermost land in sight bore N. 36 E. and Point Stephens S. W. distant four leagues. Our soundings in the night, were from forty-eight to sixty-two fathom, at the distance of between three and four leagues from the shore, which made in two hillocks. This Point I called CAPE HAWKE: it lies in the latitude of $32^{\circ} 14' S.$, longitude $207^{\circ} 30' W.$; and at four o'clock in the morning bore W. distant about eight miles; at the same time the northermost land in sight bore N. 6 E. and appeared like an island. At noon, this land bore N. 8 E. the northermost land in sight N. 13 E. and Cape Hawke S. 37 W. Our latitude, by observation, was $32^{\circ} 2' S.$ which was twelve miles to the southward of that given by the log; so that probably we had a current setting that way: by the morning amplitude and azimuth, the variation was $9^{\circ} 10' E.$ During our run along the shore, in the afternoon, we saw smoke in several places, at a little distance from the beach; and one upon the top of a hill, which was the first we had seen upon elevated ground since our arrival upon the coast. At sun-set, we had twenty-three fathom; at the distance of a league and an half from the shore: the northermost land then bore N. 13 E. and three hills, remarkably large and high; lying contiguous to each other, and not far from the beach, N. N. W. As these hills bore some resemblance to each other, we called them the THREE BROTHERS. They lie in latitude $31^{\circ} 40'$, and may be seen fourteen or sixteen leagues. We steered N. E. by N. all night, having from twenty-seven to sixty-seven fathom, at the distance of between two and six leagues from the shore.

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Saturday 12.

At day-break, we steered north, for the northermost land in sight. At noon, we were four leagues from the shore, and by observation, in latitude $31^{\circ} 18' S.$, which was fifteen miles to the southward of that given by the log; our longitude $206^{\circ} 58' W.$ In the afternoon, we stood in for the land, where we saw smoke in several places, till six in the evening, when, being within three or four miles of it, and in twenty-four fathom of water, we stood off with a fresh breeze at N. and N. N. W. till midnight, when we had 118 fathom, at the distance of eight leagues from the land, and then tacked. At three in the morning, the wind veered to the westward, when we tacked and stood to the northward. At noon, our latitude, by observation, was $30^{\circ} 43' S.$, and our longitude $206^{\circ} 45' W.$ At this time we were between three and four leagues from the shore, the northermost part of which bore from us N. 13 W. and a point, or head land, on which we saw fires that produced a great quantity of smoke, bore W. distant four leagues. To this Point I gave the name of SMOKEY CAPE: it is of a considerable height, and over the pitch of the Point is a round hillock; within it are two others, much higher and larger, and within them the land is very low. Our latitude was $30^{\circ} 31' S.$, longitude $206^{\circ} 54' W.$: this day the observed latitude was only five miles south of the log. We saw smoke in several parts along the coast, besides that seen upon Smokey Cape.

In the afternoon, the wind being at N. E. we stood off and on, and at three or four miles distance from the shore had thirty fathom water: the wind afterwards coming cross off land, we stood to the northward, having from thirty to twenty-one fathom, at the distance of four or five miles from the shore.

Monday 14.

At five in the morning, the wind veered to the north, and blew fresh, attended with squalls: at eight, it began to thunder

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Monday 14.

der and rain, and in about an hour it fell calm, which gave us an opportunity to sound, and we had eighty-six fathom at between four and five leagues from the shore: soon after this we had a gale from the southward, with which we steered N. by W. for the northermost land in sight. At noon, we were about four leagues from the shore, and by observation, in latitude $30^{\circ} 22'$, which was nine miles to the southward of our reckoning, longitude $206^{\circ} 39' W.$ Some lands near the shore, of a considerable height, bore W.

As we advanced to the northward, from Botany Bay, the land gradually increased in height, so that in this latitude it may be called a hilly country. Between this latitude and the Bay, it exhibits a pleasing variety of ridges, hills, vallies, and plains, all clothed with wood, of the same appearance with that which has been particularly described: the land near the shore is in general low and sandy, except the points, which are rocky, and over many of them are high hills, which, at their first rising out of the water, have the appearance of islands. In the afternoon, we had some small rocky islands between us and the land, the southermost of which lies in latitude $30^{\circ} 10'$, and the northermost in $29^{\circ} 58'$, and somewhat more than two leagues from the land: about two miles without the northermost island we had thirty-three fathom water. Having the advantage of a moon, we steered along the shore all night, in the direction of N. and N. by E. keeping at the distance of about three leagues from the land, and having from twenty to twenty-five fathom water. As soon as it was light, having a fresh gale, we made all the sail we could, and at nine o'clock in the morning, being about a league from the shore, we discovered smoke in many places, and having recourse to our glasses, we saw about twenty of the natives, who had each a large bundle

Tuesday 15.

upon.

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Tuesday 15.

upon his back, which we conjectured to be palm leaves for covering their houses: we continued to observe them above an hour, during which they walked upon the beach, and up a path that led over a hill of a gentle ascent, behind which we lost sight of them: not one of them was observed to stop and look towards us, but they trudged along, to all appearance, without the least emotion either of curiosity or surprise, though it is impossible they should not have seen the ship by a casual glance as they walked along the shore; and though she must, with respect to every other object they had yet seen, have been little less stupendous and unaccountable than a floating mountain with all its woods would have been to us. At noon, our latitude, by observation, was $28^{\circ} 39' S.$, and longitude $206^{\circ} 27' W.$ A high point of land, which I named CAPE BYRON, bore N. W. by W. at the distance of three miles. It lies in latitude $28^{\circ} 37' 30'' S.$, longitude $206^{\circ} 30' W.$ and may be known by a remarkable sharp peaked mountain, which lies inland, and bears from it N. W. by W. From this point, the land trends N. 13. W.: inland it is high and hilly, but low near the shore; to the southward of the point it is also low and level. We continued to steer along the shore with a fresh gale, till sun-set, when we suddenly discovered breakers a-head, directly in the ship's course, and also on our larboard bow. At this time we were about five miles from the land, and had twenty fathom water: we hauled up east till eight, when we had run eight miles, and increased our depth of water to forty-four fathom: we then brought to, with the ship's head to the eastward, and lay upon this tack till ten, when, having increased our sounding to seventy-eight fathom, we wore, and lay with the ship's head to the land till five in the morning, when we made sail, and at daylight, were greatly surprized to find ourselves farther to the southward, than we had been the evening before, though

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though the wind had been southerly, and blown fresh all night: we now saw the breakers again within us, and passed them at the distance of one league. They lie in latitude $28^{\circ} 8' S.$ stretching off east two leagues from a point of land, under which is a small island. Their situation may always be known by the peaked mountain which has been just mentioned, and which bears from them S. W. by W. for this reason I have named it MOUNT WARNING. It lies seven or eight leagues inland, in latitude $28^{\circ} 22' S.$ The land about it is high and hilly, but it is of itself sufficiently conspicuous to be at once distinguished from every other object. The Point off which these shoals lie, I have named POINT DANGER. To the northward of this Point the land is low, and trends N. W. by N.; but it soon turns again more to the northward.

At noon, we were about two leagues from the land, and by observation, in latitude $27^{\circ} 46' S.$ which was seventeen miles to the southward of the log; our longitude was $206^{\circ} 26' W.$ Mount Warning bore S. 26 W. distant fourteen leagues, and the northermost land in sight bore N. We pursued our course along the shore, at the distance of about two leagues, in the direction of N. $\frac{3}{4}$ E. till between four and five in the afternoon, when we discovered breakers on our larboard bow. Our depth of water was thirty-seven fathom, and at sun-set, the northermost land bore N. by W. the breakers N. W. by W. distant four miles, and the northermost land set at noon, which formed a point, and to which I gave the name of POINT LOOK-OUT, W. distant five or six miles, in the latitude of $27^{\circ} 6'.$ On the north side of this Point, the shore forms a wide open bay, which I called MORETON'S BAY, in the bottom of which the land is so low that I could but just see it from the top-mast head. The breakers lie between three and four miles from Point Look-out; and at this

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Thursday 17.

time we had a great sea from the southward, which broke upon them very high. We stood on N. N. E. till eight o'clock, when having passed the breakers, and deepened our water to fifty-two fathom, we brought to till midnight, when we made sail again to the N. N. E. At four in the morning, we had 135 fathom, and when the day broke, I perceived that during the night I had got much farther northward, and from the shore, than I expected from the course we steered, for we were distant at least seven leagues; I therefore hauled in N. W. by W. with a fresh gale at S. S. W. The land that was farthest to the north the night before, now bore S. S. W. distant six leagues, and I gave it the name of CAPE MORETON, it being the north point of Moreton's Bay: its latitude is $26^{\circ} 56'$, and its longitude is $206^{\circ} 28'$. From Cape Moreton the land trends away west, farther than can be seen, for there is a small space, where at this time no land is visible, and some on board having also observed that the sea looked paler than usual, were of opinion that the bottom of Moreton's Bay opened into a river: we had here thirty-four fathom water, and a fine sandy bottom: this alone would have produced the change that had been observed in the colour of the water; and it was by no means necessary to suppose a river to account for the land at the bottom of the Bay not being visible, for supposing the land there to be as low as we knew it to be in a hundred other parts of the coast, it would have been impossible to see it from the station of the ship; however, if any future navigator should be disposed to determine the question, whether there is or is not a river in this place, which the wind would not permit us to do, the situation may always be found by three hills which lie to the northward of it, in the latitude of $26^{\circ} 53'$. These hills, lie but a little way inland, and not far from each other: they are remarkable for the singular form of their elevation, which

which very much resembles a glass-house, and for which reason I called them the GLASS HOUSES: the northermost of the three is the highest and largest: there are also several other peaked hills inland to the northward of these, but they are not nearly so remarkable. At noon, our latitude was, by observation, $26^{\circ} 28'$ S. which was ten miles to the northward of the log, a circumstance which had never before happened upon this coast; our longitude was $206^{\circ} 46'$. At this time we were between two and three leagues from the land, and had twenty-four fathom water. A low bluff point, which was the south head of a sandy bay, bore N. 62° W. distant three leagues, and the northermost point of land in sight bore N. $\frac{1}{4}$ E. This day we saw smoke in several places, and some at a considerable distance inland.

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In steering along the shore at the distance of two leagues, our soundings were from twenty-four to thirty-two fathom, with a sandy bottom. At six in the evening, the northermost point of land bore N. $\frac{1}{4}$ W. distant four leagues; at ten it bore N. W. by W. $\frac{1}{2}$ W. and as we had seen no land to the northward of it, we brought to, not well knowing which way to steer.

At two in the morning, however, we made sail with the wind at S. W. and at daylight, we saw the land extending as far as N. $\frac{3}{4}$ E. the point we had set the night before bore S. W. by W. distant between three and four leagues. It lies in latitude $25^{\circ} 58'$, longitude $206^{\circ} 48'$ W.: the land within it is of a moderate and equal height, but the point itself is so unequal, that it looks like two small islands lying under the land, for which reason I gave it the name of DOUBLE ISLAND POINT; it may also be known by the white cliffs on the north side of it. Here the land trends to the N. W. and forms a large open bay, the bottom of which is so low a flat that

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from the deck it could scarcely be seen. In crossing this bay, our depth of water was from thirty to twenty-two fathom, with a white sandy bottom. At noon, we were about three leagues from the shore, in latitude $25^{\circ} 34'$ S. longitude $206^{\circ} 45'$ W.: Double Island Point bore S. $\frac{3}{4}$ W. and the northernmost land in sight N. $\frac{3}{4}$ E. This part of the coast, which is of a moderate height, is more barren than any we had seen, and the soil more sandy. With our glasses we could discover that the sands, which lay in great patches of many acres, were moveable, and that some of them had not been long in the place they possessed; for we saw in several parts, trees half buried, the tops of which were still green; and in others, the naked trunks of such as the sand had surrounded long enough to destroy. In other places the woods appeared to be low and shrubby, and we saw no signs of inhabitants. Two water snakes swam by the ship: they were beautifully spotted, and in every respect like land snakes, except that their tails were broad and flat, probably to serve them instead of fins in swimming. In the morning of this day, the variation was $8^{\circ} 20'$ E. and in the evening, $8^{\circ} 36'$. During the night, we continued our course to the northward, with a light breeze from the land, being distant from it between two and three leagues, and having from twenty-three to twenty-seven fathom with a fine sandy bottom.

Saturday 19.

At noon on the 19th, we were about four miles from the land, with only thirteen fathom. Our latitude was $25^{\circ} 4'$, and the northernmost land in sight bore N. 21 W. distant eight miles. At one o'clock, being still four miles distant from the shore, but having seventeen fathom water, we passed a black bluff head, or point of land, upon which a great number of the natives were assembled, and which therefore I called INDIAN HEAD: it lies in latitude $25^{\circ} 3'$. About four miles N. by W. of this Head, is another very like it, from whence

whence the land trends away somewhat more to the westward: next to the sea it is low and sandy, and behind it nothing was to be seen, even from the mast-head. Near Indian Head we saw more of the natives, and upon the neighbouring shore fires by night, and smoke by day. We kept to the northward all night, at the distance of from four miles to four leagues from the shore, and with a depth of water from seventeen to thirty-four fathom. At day-break, the northermost land bore from us W. S. W. and seemed to end in a point, from which we discovered a reef running out to the northward as far as we could see. We had hauled our wind to the westward before it was light, and continued the course till we saw the breakers upon our lee bow. We now edged away N. W. and N. N. W. along the east side of the shoal, from two to one mile distant, having regular soundings from thirteen to seven fathom, with a fine sandy bottom. At noon, our latitude, by observation, was $20^{\circ} 26'$, which was thirteen miles to the northward of the log: we judged the extreme point of the shoal to bear from us about N. W. and the point from which it seemed to run out, bore S. $\frac{3}{4}$ W. distant twenty miles. This point I named SANDY CAPE, from two very large patches of white sand which lay upon it. It is sufficiently high to be seen at the distance of twelve leagues, in clear weather, and lies in latitude $24^{\circ} 45'$, longitude $206^{\circ} 51'$: the land trends from it S. W. as far as can be seen. We kept along the east side of the shoal till two in the afternoon, when, judging that there was a sufficient depth of water upon it to allow passage for the ship, I sent the boat a-head to sound, and upon her making the signal for more than five fathom, we hauled our wind, and stood over the tail of it in six fathom. At this time we were in latitude $24^{\circ} 22'$, and Sandy Cape bore S. $\frac{1}{2}$ E. distant eight leagues; but the direction of the shoal is nearest N. N. W.

and

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and S. S. E. It is remarkable that when on board the ship we had six fathom, the boat, which was scarcely a quarter of a mile to the southward, had little more than five, and that immediately after six fathom we had thirteen, and then twenty, as fast as the man could cast the lead: from these circumstances, I conjectured that the west side of the shoal was steep. This shoal I called the *BREAK SEA SPIT*, because we had now smooth water, and to the southward of it we had always a high sea from the S. E. At six in the evening, the land of Sandy Cape extended from S. 17 E. to S. 27 E. at the distance of eight leagues; our depth of water was twenty-three fathom: with the same soundings we stood to the westward all night. At seven in the morning, we saw, from the mast-head, the land of Sandy Cape bearing S. E. $\frac{1}{2}$ E. distant about thirteen leagues: at nine, we discovered land to the westward, and soon after saw smoke in several places. Our depth of water was now decreased to seventeen fathom, and by noon we had no more than thirteen, though we were seven leagues from the land, which extended from S. by W. to W. N. W. Our latitude at this time was $24^{\circ} 28' S$. For a few days past we had seen several of the sea birds called boobies, not having met with any of them before; last night a small flock of them passed the ship, and went away to the N. W. and in the morning, from about half an hour before sun-rise, to half an hour after, flights of them were continually coming from the N. N. W. and flying to the S. S. E. nor was one of them seen to fly in any other direction; we therefore conjectured that there was a lagoon, river, or inlet of shallow water, in the bottom of the deep bay, to the southward of us, whither these birds resorted to feed in the day, and that not far to the northward there were some islands to which they repaired in the night. To this bay I gave the name of *HERVEY'S BAY*, in honour of Captain Hervey.

In

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Monday 21.

In the afternoon, we stood in for the land, steering S. W. with a gentle breeze at S. E. till four o'clock, when, being in latitude $24^{\circ} 36'$, about two leagues from the shore, and having nine fathom water, we bore away along the coast N. W. by W. and at the same time could see land extending to the S. S. E. about eight leagues. Near the sea the land is very low, but within there are some lofty hills, all thickly clothed with wood. While we were running along the shore, we shallowed our water from nine to seven fathom, and at one time we had but six, which determined us to anchor for the night.

Tuesday 22.

At six in the morning we weighed, with a gentle breeze from the southward, and steered N. W. $\frac{1}{4}$ W. edging in for the land till we got within two miles of it, with water from seven to eleven fathom: we then steered N. N. W. as the land lay, and at noon, our latitude was $24^{\circ} 19'$. We continued in the same course, at the same distance, with from twelve fathom to seven, till five in the evening, when we were abreast of the south point of a large open bay, in which I intended to anchor. During this course, we discovered with our glasses that the land was covered with palm-nut-trees, which we had not seen from the time of our leaving the islands within the Tropick: we also saw two men walking along the shore, who did not condescend to take the least notice of us. In the evening, having hauled close upon a wind, and made two or three trips, we anchored about eight o'clock in five fathom, with a fine sandy bottom. The south point of the bay bore E. $\frac{3}{4}$ S. distant two miles, the north point N. W. $\frac{1}{4}$ N. and about the same distance from the shore.

Wednes. 23.

Early the next morning I went ashore, with a party of men, in order to examine the country, accompanied by Mr. Banks, Dr. Solander, the other gentlemen, and Tupia: the

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wind blew fresh, and we found it so cold, that being at some distance from the shore, we took our cloaks as a necessary equipment for the voyage. We landed a little within the fourth point of the bay, where we found a channel leading into a large lagoon: this channel I proceeded to examine, and found three fathom water till I got about a mile up it, where I met with a shoal, upon which there was little more than one fathom, but having passed over it, I had three fathom again. The entrance of this channel lies close to the fourth point of the bay, being formed by the shore on the east, and on the west by a large spit of sand: it is about a quarter of a mile broad, and lies in S. by W. In this place there is room for a few ships to lie in great security, and a small stream of fresh water; I would have rowed into the lagoon, but was prevented by shallows. We found several bogs, and swamps of salt water, upon which, and by the sides of the lagoon, grows the true mangrove, such as is found in the West Indies, and the first of the kind that we had met with. In the branches of these mangroves there were many nests of a remarkable kind of ant, that was as green as grass: when the branches were disturbed they came out in great numbers, and punished the offender by a much sharper bite than ever we had felt from the same kind of animal before. Upon these mangroves also we saw small green caterpillars in great numbers: their bodies were thick set with hairs, and they were ranged upon the leaves side by side like a file of soldiers, to the number of twenty or thirty together: when we touched them, we found that the hair on their bodies had the quality of a nettle, and gave us a much more acute, though less durable pain. The country here is manifestly worse than about Botany Bay: the soil is dry and sandy, but the sides of the hills are covered with trees, which grow separately, without underwood. We found

found here the tree that yields a gum like the *Sanguis draconis*; but it is somewhat different from the trees of the same kind which we had seen before, for the leaves are longer, and hang down like those of the weeping willow. We found also much less gum upon them, which is contrary to the established opinion, that the hotter the climate, the more gums exude. Upon a plant also, which yielded a yellow gum, there was less than upon the same kind of plant in Botany Bay. Among the shoals and sand-banks we saw many large birds, some in particular of the same kind that we had seen in Botany Bay, much bigger than swans, which we judged to be pelicans; but they were so shy that we could not get within gun-shot of them. Upon the shore we saw a species of the bustard, one of which we shot, it was as large as a turkey, and weighed seventeen pounds and an half. We all agreed that this was the best bird we had eaten since we left England; and in honour of it we called this inlet BUSTARD BAY. It lies in latitude $24^{\circ} 4'$, longitude $208^{\circ} 18'$. The sea seemed to abound with fish; but, unhappily, we tore our seine all to pieces at the first haul: upon the mud-banks, under the mangroves, we found innumerable oysters of various kinds; among others the hammer-oyster, and a large proportion of small pearl-oysters: if in deeper water there is equal plenty of such oysters at their full growth, a pearl fishery might certainly be established here to very great advantage.

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The people who were left on board the ship said, that while we were in the woods about twenty of the natives came down to the beach, abreast of her, and having looked at her sometime, went away; but we that were ashore, though we saw smoke in many places, saw no people: the smoke was at places too distant for us to get to them by land, except one,

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to which we repaired: we found ten small fires still burning within a few paces of each other; but the people were gone: we saw near them several vessels of bark, which we supposed to have contained water, and some shells and fish-bones, the remains of a recent meal. We saw also, lying upon the ground, several pieces of soft bark, about the length and breadth of a man, which we imagined might be their beds; and, on the windward side of the fires, a small shade, about a foot and a half high, of the same substance. The whole was in a thicket of close trees, which afforded good shelter from the wind. The place seemed to be much trodden, and as we saw no house, nor any remains of a house, we were inclined to believe that as these people had no clothes, they had no dwelling; but spent their nights, among the other commoners of Nature, in the open air: and Tupia himself, with an air of superiority and compassion, shook his head, and said that they were *Taata Enos*, 'poor wretches.' I measured the perpendicular height of the last tide, and found it to be eight feet above low-water mark, and from the time of low-water this day, I found that it must be high-water at the full and change of the moon at eight o'clock.

Thursday 24.

At four o'clock in the morning we weighed, and with a gentle breeze at south made sail out of the bay. In standing out our soundings were from five to fifteen fathom; and at day-light, when we were in the greatest depth, and abreast of the north head of the bay, we discovered breakers stretching out from it N.N.E. between two and three miles, with a rock at the outermost point of them, just above water. While we were passing these rocks, at the distance of about half a mile, we had from fifteen to twenty fathom, and as soon as we had passed them, we hauled along shore W.N.W. for the farthest land we had in sight. At noon, our latitude by
observation

observation was $23^{\circ} 52'$ S.; the north part of Bustard Bay bore S. 62 E. distant ten miles; and the northermost land in sight N. 60 W.; the longitude was $208^{\circ} 37'$, and our distance from the nearest shore six miles, with fourteen fathom water.

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 Thursday 24.

Till five in the afternoon it was calm, but afterwards we steered before the wind N. W. as the land lay till ten at night, and then brought to, having had all along fourteen and fifteen fathom. At five in the morning we made sail; and at day-light the northermost point of the main bore N. 70 W. Soon after we saw more land, making like islands, and bearing N. W. by N. At nine, we were abreast of the point, at the distance of one mile, with fourteen fathom water. This point I found to lie directly under the Tropic of Capricorn; and for that reason I called it CAPE CAPRICORN: its longitude is $208^{\circ} 58'$ W.: it is of a considerable height, looks white and barren, and may be known by some islands which lie to the N. W. of it, and some small rocks at the distance of about a league S. E. On the west side of the Cape there appeared to be a lagoon, and on the two spits which formed the entrance we saw an incredible number of the large birds that resemble a pelican. The northermost land now in sight bore from Cape Capricorn N. 24 W. and appeared to be an island; but the main land trended W. by N. $\frac{1}{2}$ N. which course we steered, having from fifteen to six fathom, and from six to nine, with a hard sandy bottom. At noon, our latitude by observation was $23^{\circ} 24'$ S.; Cape Capricorn bore S. 60 E. distant two leagues; and a small island N. by E. two miles: in this situation we had nine fathom, being about four miles from the main, which, next the sea, is low and sandy, except the points which are high and rocky. The country inland is hilly, but by no means of a pleasing aspect. We continued to stand to the N. W. till four o'clock in the afternoon, when it fell

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calm;

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calm; and we soon after anchored in twelve fathom, having the main land and islands in a manner all round us, and Cape Capricorn bearing S. 54 E. distant four leagues. In the night, we found the tide rise and fall near seven feet; and the flood to set to the westward, and the ebb to the eastward, which is just contrary to what we found when we were at anchor to the eastward of Bustard Bay.

Saturday 26.

At six in the morning we weighed, with a gentle breeze at South, and stood away to the N. W. between the outermost range of islands and the main, leaving several small islands between the main and the ship, which we passed at a very little distance: our soundings being irregular, from twelve to four fathom, I sent a boat ahead to sound. At noon we were about three miles from the main, and about the same distance from the islands without us: our latitude by observation was $23^{\circ} 7' S.$: the main land here is high and mountainous; the islands which lie off it are also most of them high, and of a small circuit, having an appearance rather of barrenness than fertility. At this time we saw smoke in many places at a considerable distance inland, and therefore conjectured that there might be a lagoon, river, or inlet running up the country, the rather as we had passed two places which had the appearance of being such; but our depth of water was too little to encourage me to venture where I should probably have less. We had not stood to the northward above an hour, before we suddenly fell into three fathom; upon which I anchored, and sent away the Master to sound the channel which lay to leeward of us, between the northernmost island and the main: it appeared to be pretty broad, but I suspected that it was shallow, and so indeed it was found; for the master reported at his return that in many places he had only two fathom and an

half,

half, and where we lay at anchor we had only sixteen feet, which was not two feet more than the ship drew. While the master was sounding the channel, Mr. Banks tried to fish from the cabin windows with hook and line: the water was too shallow for fish; but the ground was almost covered with crabs, which readily took the bait, and sometimes held it so fast in their claws, that they did not quit their hold till they were considerably above water. These crabs were of two sorts, and both of them such as we had not seen before: one of them was adorned with the finest blue that can be imagined, in every respect equal to the ultramarine, with which all his claws, and every joint was deeply tinged: the under part of him was white, and so exquisitely polished that in colour and brightness it exactly resembled the white of old china: the other was also marked with the ultramarine upon his joints, and his toes, but somewhat more sparingly; and his back was marked with three brown spots which had a singular appearance. The people who had been out with the boat to sound, reported, that upon an island where we had observed two fires, they had seen several of the inhabitants, who called to them, and seemed very desirous that they should land. In the evening, the wind veered to E.N.E. which gave us an opportunity to stretch three or four miles back by the way we came; after which, the wind shifted to the South, and obliged us again to anchor in six fathom.

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At five in the morning, I sent away the Master to search for a passage between the islands, while we got the ship under sail; and as soon as it was light we followed the boat, which made a signal that a passage had been found. As soon as we got again into deep water, we made sail to the northward, as the land lay, with soundings from nine fathom to fifteen, and some small islands still without us. At noon we were about

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about two leagues distant from the main; and by observation in latitude $22^{\circ} 53'$ S. The northermost point of land in sight now bore N.N.W. distant ten miles. To this point I gave the name of CAPE MANIFOLD, from the number of high hills which appeared over it: it lies in latitude $22^{\circ} 43'$ S. and distant about seventeen leagues from Cape Capricorn, in the direction of N. 26 W. Between these Capes the shore forms a large bay, which I called KEPPEL BAY; and I also distinguished the islands by the name of KEPPEL'S ISLANDS. In this bay there is good anchorage; but what refreshments it may afford, I know not: we caught no fish, though we were at anchor; but probably there is fresh water in several places, as both the islands and the main are inhabited. We saw smoke and fires upon the main; and upon the islands we saw people. At three in the afternoon, we passed Cape Manifold, from which the lands trends N.N.W. The land of the Cape is high, rising in hills directly from the sea; and may be known by three islands which lie off it, one of them near the shore, and the other two eight miles out at sea. One of these islands is low and flat, and the other high and round. At six o'clock in the evening we brought to, when the northermost part of the main in sight bore N.W. and some islands which lie off it N. 31 W. Our soundings after twelve o'clock were from twenty to twenty-five fathom, and in the night from thirty to thirty-four.

Monday 28.

At day-break we made sail, Cape Manifold bearing S. by E. distant eight leagues, and the islands which I had set the night before were distant four miles in the same direction. The farthest visible point of the main bore N. 67 W. at the distance of twenty-two miles; but we could see several islands to the northward of this direction. At nine o'clock in the forenoon, we were abreast of the point which I called

CAPE TOWNSHEND. It lies in latitude $22^{\circ} 15'$; longitude $209^{\circ} 43'$: the land is high and level, and rather naked than woody. Several islands lie to the northward of it, at the distance of four or five miles out at sea; three or four leagues to the S.E. the shore forms a bay, in the bottom of which there appeared to be an inlet or harbour. To the westward of the Cape the land trends S.W. $\frac{1}{2}$ S. and there forms a very large bay which turns to the eastward, and probably communicates with the inlet, and makes the land of the Cape an island. As soon as we got round this Cape, we hauled our wind to the westward, in order to get within the islands, which lie scattered in the bay in great numbers, and extend out to sea as far as the eye could reach even from the mast-head: these islands vary both in height and circuit from each other; so that, although they are very numerous, no two of them are alike. We had not stood long upon a wind before we came into shoal water, and were obliged to tack at once to avoid it. Having sent a boat ahead, I bore away W. by N. many small islands, rocks, and shoals, lying between us and the main, and many of a larger extent without us: our soundings till near noon were from fourteen to seventeen fathom, when the boat made the signal for meeting with shoal water: upon this we hauled close upon a wind to the eastward, but suddenly fell into three fathom and a quarter; we immediately dropped an anchor, which brought the ship up with all her sails standing. When the ship was brought up we had four fathom, with a coarse sandy bottom, and found a strong tide setting to the N.W. by W. $\frac{1}{2}$ W. at the rate of near three miles an hour, by which we were so suddenly carried upon the shoal. Our latitude by observation was $22^{\circ} 8'$ S.; Cape Townshend bore E. 16° S. distant thirteen miles; and the westernmost part of the

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the main in sight W. $\frac{3}{4}$ N. At this time a great number of islands lay all round us.

In the afternoon, having founded round the ship, and found that there was water sufficient to carry her over the shoal, we weighed, and about three o'clock made sail and stood to the westward, as the land lay, having sent a boat ahead to found. At six in the evening, we anchored in ten fathom, with a sandy bottom, at about two miles distance from the main; the westernmost part of which bore W.N.W. and a great number of islands, lying a long way without us, were still in sight.

Tuesday 29.

At five o'clock the next morning, I sent away the Master with two boats to found the entrance of an inlet which bore from us west, at about the distance of a league, into which I intended to go with the ship, that I might wait a few days till the moon should encrease, and in the mean time examine the country. As soon as the ship could be got under sail, the boats made the signal for anchorage; upon which we stood in, and anchored in five fathom water, about a league within the entrance of the inlet; which, as I observed a tide to flow and ebb considerably, I judged to be a river that ran up the country to a considerable distance. In this place I had thoughts of laying the ship ashore, and cleaning her bottom; I therefore landed with the Master in search of a convenient place for that purpose, and was accompanied by Mr. Banks and Dr. Solander. We found walking here exceedingly troublesome, for the ground was covered with a kind of grass, the seeds of which were very sharp and bearded backwards; so that whenever they stuck into our clothes, which indeed was at every step, they worked forwards by means of the beard, till they got at the flesh; and at the same time we were surrounded by a cloud of musquitos, which incessantly tormented

mented us with their stings. We soon met with several places where the ship might conveniently be laid ashore; but to our great disappointment we could find no fresh water. We proceeded however up the country, where we found gum trees like those that we had seen before, and observed that here also the gum was in very small quantities. Upon the branches of these trees, and some others, we found ants nests, made of clay, as big as a bushel, something like those described in Sir Hans Sloan's Natural History of Jamaica, vol. ii. p. 221, tab. 258, but not so smooth: the ants which inhabited these nests were small, and their bodies white. But upon another species of the tree we found a small black ant, which perforated all the twigs, and having worked out the pith, occupied the pipe which had contained it; yet the parts in which these insects had thus formed a lodgment, and in which they swarmed in amazing numbers, bore leaves and flowers, and appeared to be in as flourishing a state as those that were found. We found also an incredible number of butterflies, so that for the space of three or four acres the air was so crowded with them that millions were to be seen in every direction, at the same time that every branch and twig was covered with others that were not upon the wing. We found here also a small fish of a singular kind; it was about the size of a minnow, and had two very strong breast fins: we found it in places that were quite dry, where we supposed it might have been left by the tide; but it did not seem to have become languid by the want of water; for upon our approach it leaped away, by the help of the breast fins, as nimbly as a frog: neither indeed did it seem to prefer water to land; for when we found it in the water, it frequently leaped out, and pursued its way upon dry ground: we also observed that when it was in places where small stones were standing above the surface

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of the water at a little distance from each other, it chose rather to leap from stone to stone, than to pass through the water; and we saw several of them pass entirely over puddles in this manner, till they came to dry ground, and then leap away.

In the afternoon we renewed our search after fresh water, but without success; and therefore I determined to make my stay here but short: however, having observed from an eminence that the inlet penetrated a considerable way into the country, I determined to trace it in the morning.

Wednes. 30.

At sun-rise I went ashore, and climbing a considerable hill, I took a view of the coast and the islands that lie off it, with their bearings, having an azimuth compass with me for that purpose; but I observed that the needle differed very considerably in its position, even to thirty degrees, in some places more, in others less; and once I found it differ from itself no less than two points in the distance of fourteen feet. I took up some of the loose stones that lay upon the ground, and applied them to the needle, but they produced no effect; and I therefore concluded that there was iron ore in the hills, of which I had remarked other indications both here, and in the neighbouring parts. After I had made my observations upon the hill, I proceeded with Dr. Solander up the inlet; I set out with the first of the flood, and long before high-water I had advanced above eight leagues. Its breadth thus far was from two to five miles, upon a S.W. by S. direction; but here it opened every way, and formed a large lake, which to the N.W. communicated with the sea; and I not only saw the sea in this direction, but found the tide of flood coming strongly in from that point: I also observed an arm of this lake extending to the eastward, and it is not improbable that it may communicate with the sea in the bottom.

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tom of the bay, which lies to the westward of Cape Town-
shend. On the south side of the lake is a ridge of high hills
which I was very desirous to climb; but it being high-water,
and the day far spent, I was afraid of being bewildered
among the shoals in the night, especially as the weather was
dark and rainy; and therefore I made the best of my way to
the ship. In this excursion I saw only two people, and they
were at a distance; they followed the boat along the shore a
good way, but the tide running strongly in my favour I could
not prudently wait for them: I saw however several fires in
one direction, and smoke in another, but they also were at a
distance. While I was tracing the inlet with Dr. Solander,
Mr. Banks was endeavouring to penetrate into the country,
where several of the people who had leave to go ashore were
also rambling about. Mr. Banks and his party found their
course obstructed by a swamp, covered with mangroves,
which however they resolved to pass; the mud was almost
knee deep, yet they resolutely went on; but before they got
half way, they repented of their undertaking: the bottom
was covered with branches of trees interwoven with each
other, sometimes they kept their footing upon them, some-
times their feet slipped through, and sometimes they were so
entangled among them, that they were forced to free them-
selves by groping in the mud and slime with their hands. In
about an hour however they crossed it, and judged it might
be about a quarter of a mile over. After a short walk they
came up to a place where there had been four small fires,
and near them some shells and bones of fish, that had been
roasted: they found also heaps of grass laid together, where
four or five people appeared to have slept. The Second
Lieutenant, Mr. Gore, who was at another place, saw a little
water lying in the bottom of a gully, and near it the track
of a large animal: some bustards were also seen, but none

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of them shot, nor any other bird except a few of the beautiful loriquets which we had seen in Botany Bay. Mr. Gore, and one of the midshipmen, who were in different places, said that they had heard the voices of Indians near them, but had seen none: the country in general appeared sandy and barren, and being destitute of fresh water, it cannot be supposed to have any settled inhabitants. The deep gullies, which were worn by torrents from the hills, prove, that at certain seasons the rains here are very copious and heavy.

The inlet in which the ship lay I called THIRSTY SOUND, because it afforded us no fresh water. It lies in latitude $22^{\circ} 10' S.$ and longitude $210^{\circ} 18' W.$; and may be known by a group of small islands lying under the shore, from two to five leagues distant, in the direction of N.W. and by another group of islands that lie right before it, between three and four leagues out at sea. Over each of the points that form the entrance is a high round hill, which on the N.W. is a peninsula that at high-water is surrounded by the sea: they are bold to both the shores, and the distance between them is about two miles. In this inlet is good anchorage in seven, six, five, and four fathom; and places very convenient for laying a ship down, where, at spring-tides, the water does not rise less than sixteen or eighteen feet. The tide flows at the full and change of the moon about eleven o'clock. I have already observed that here is no fresh water, nor could we procure refreshment of any other kind: we saw two turtles, but we were not able to take either of them: neither did we catch either fish or wild-fowl, except a few small land-birds: we saw indeed the same sorts of water-fowl as in Botany Bay, but they were so shy that we could not get a shot at them.

As I had not therefore a single inducement to stay longer
Thursday 31. in this place, I weighed anchor at six o'clock in the morn-
ing

ing of Thursday the 31st of May, and put to sea. We stood to the N. W. with a fresh breeze at S. S. E. and kept without the group of islands that lie in shore, and to the N. W. of Thirsty Sound, as there appeared to be no safe passage between them and the main: at the same time we had a number of islands without us, extending as far as we could see: during our run in this direction our depth of water was ten, eight, and nine fathom. At noon, the west point of Thirsty Sound, which I have called PIER HEAD, bore S. 36 E. distant five leagues; the east point of the other inlet, which communicates with the Sound, bore S. by W. distant two leagues; the group of islands just mentioned lay between us and the point, and the farthest part of the main in sight, on the other side of the inlet, bore N. W. Our latitude by observation was $21^{\circ} 53'$. At half an hour after twelve, the boat, which was founding ahead, made the signal for shoal water, and we immediately hauled our wind to the N. E. At this time we had seven fathom, at the next cast five, and at the next three, upon which we instantly dropped an anchor; that brought the ship up. Pier Head, the north west point of Thirsty-sound, bore S. E. distant six leagues, being half-way between the islands which lie off the east point of the western inlet, and three small islands which lie directly without them. It was now the first of the flood, which we found to set N. W. by W. $\frac{1}{2}$ W.; and having founded about the shoal, upon which we had three fathom, and found deep water all round it, we got under sail, and having hauled round the three islands that have been just mentioned, came to an anchor under the lee of them, in fifteen fathom water; and the weather being dark, hazy, and rainy, we remained there till seven o'clock in the morning. At this time we got again under sail, and stood to the N. W. with a fresh breeze at S. S. E.; having the main land in sight, and a number of islands

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islands all round us, some of which lay out at sea as far as the eye could reach. The western inlet, which in the chart is distinguished by the name of Broad Sound, we had now all open; at the entrance, it is at least nine or ten leagues wide: in it, and before it, lie several islands, and probably shoals also; for our soundings were very irregular, varying suddenly from ten to four fathom. At noon, our latitude by observation was $21^{\circ} 29'$ S.; a point of land which forms the north west entrance into Broad Sound, and which I have named CAPE PALMERSTON, lying in latitude $21^{\circ} 30'$, longitude $210^{\circ} 54'$ W. bore W. by N. distant three leagues. Our latitude was $21^{\circ} 27'$, our longitude $210^{\circ} 57'$. Between this Cape and Cape Townshend lies the bay which I have called the BAY OF INLETS. We continued to stand to the N.W. and N.W. by N. as the land lay, under an easy sail, having a boat ahead to sound: at first the soundings were very irregular, from nine to four fathom; but afterwards they were regular, from nine to eleven. At eight in the evening, being about two leagues from the main land, we anchored in eleven fathom, with a sandy bottom; and soon after we found the tide setting with a flow motion to the westward. At one o'clock it was slack, or low-water; and at half an hour after two the ship tended to the eastward, and rode so till six in the morning, when the tide had risen eleven feet. We now got under sail, and stood away in the direction of the coast, N.N.W. From what we had observed of the tide during the night, it is plain, that the flood came from the N.W.; whereas the preceding day, and several days before, it came from the S.E.; nor was this the first, or even second time that we had remarked the same thing. At sun-rise this morning, we found the variation to be $6^{\circ} 45'$ E.; and in steering along the shore, between the island and the main, at the distance of about two leagues from the main, and three or four

Saturday 2.

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Saturday 2.

four from the island, our soundings were regular from twelve to nine fathom; but about eleven o'clock in the forenoon we were again embarrassed with shoal water, having at one time not more than three fathom; yet we got clear, without casting anchor. At noon we were about two leagues from the main, and four from the islands without us. Our latitude by observation was $20^{\circ} 56'$, and a high promontory, which I named CAPE HILLSBOROUGH, bore W. $\frac{1}{2}$ N. distant seven miles. The land here is diversified by mountains, hills, plains, and valleys, and seems to be well clothed with herbage and wood: the islands which lie parallel to the coast, and from five to eight or nine miles distant, are of various height and extent; scarcely any of them are more than five leagues in circumference, and many are not four miles: besides this chain of islands, which lies at a distance from the coast, there are others much less, which lie under the land, from which we saw smoke rising in different places. We continued to steer along the shore at the distance of about two leagues, with regular soundings from nine to ten fathom. At sun-set, the farthest point of the main bore N. 48 W. and to the northward of this lay some high land, which I took to be an island, and of which the north west point bore 41 W.; but not being sure of a passage, I came to an anchor about eight o'clock in the evening, in ten fathom water, with a muddy bottom. About ten we had a tide setting to the northward, and at two it had fallen nine feet; after this it began to rise, and the flood came from the northward, in the direction of the islands which lay out to sea; a plain indication that there was no passage to the N.W. This however had not appeared at day-break, when we got under sail and stood to the N.W. At eight o'clock in the morning, we discovered low land quite across what we took for an opening, which proved to be a bay, about five or six leagues

Sunday 3.

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Sunday 3.

leagues deep; upon this we hauled our wind to the eastward round the north point of the bay, which at this time bore from us N. E. by N. distant four leagues: from this point we found the land trend way N. by W. $\frac{1}{2}$ W. and a strait or passage between it and a large island, or islands, lying parallel to it. Having the tide of ebb in our favour, we stood for this passage; and at noon were just within the entrance: our latitude by observation was $20^{\circ} 26'$ S.; Cape Hillsborough bore S. by E. distant ten leagues; and the north point of the bay S. 19 W. distant four miles. This point, which I named CAPE CONWAY, lies in latitude $26^{\circ} 36'$ S. longitude $211^{\circ} 28'$ W.; and the bay which lies between this Cape and Cape Hillsborough I called REPULSE BAY. The greatest depth of water which we found in it was thirteen fathom, and the least eight. In all parts there was safe anchorage, and I believe that, upon proper examination, some good harbours would be found in it; especially at the north side within Cape Conway; for just within that Cape there lie two or three small islands, which alone would shelter that side of the bay from the southerly and south easterly winds, that seem to prevail here as a Trade. Among the many islands that lie upon this coast, there is one more remarkable than the rest; it is of a small circuit, very high and peaked, and lies E. by S. ten miles from Cape Conway, at the south end of the passage. In the afternoon, we steered through this passage, which we found to be from three to seven miles broad, and eight or nine leagues in length, N. by W. $\frac{1}{2}$ W., S. by E. $\frac{1}{2}$ E. It is formed by the main on the west, and by the islands on the east, one of which is at least five leagues in length: our depth of water in running through was from twenty to five and twenty fathom, with good anchorage every where, and the whole passage may be considered as one safe harbour, exclusive of the small bays and coves which abound on each side,

side, where ships might lie as in a basin. The land both upon the main and islands is high, and diversified by hill and valley, wood and lawn, with a green and pleasant appearance. On one of the islands we discovered with our glasses two men and a woman, and a canoe with an outrigger, which appeared to be larger, and of a construction very different from those of bark tied together at the ends, which we had seen upon other parts of the coast; we hoped therefore that the people here had made some farther advances beyond mere animal life than those that we had seen before. At six o'clock in the evening, we were nearly the length of the north end of the passage; the north westernmost point of the main in sight bore N. 54 W. and the north end of the island N. N. E. with an open sea between the two points. As this passage was discovered on Whitsunday, I called it WHITSUNDAY'S PASSAGE, and I called the islands that form it CUMBERLAND ISLANDS, in honour of his Royal Highness the Duke. We kept under an easy sail, with the lead going all night, being at the distance of about three leagues from the shore, and having from twenty-one to twenty-three fathom water. At day-break, we were abreast of the point which had been the farthest in sight to the north west the evening before, which I named CAPE GLOUCESTER. It is a lofty promontory, in latitude $19^{\circ} 59'$ S. longitude $211^{\circ} 49'$ W. and may be known by an island which lies out at sea N. by W. $\frac{1}{2}$ W. at the distance of five or six leagues from it, and which I called HOLBORNE ISLE; there are also islands lying under the land between Holborne Isle, and Whitsunday's Passage. On the west side of Cape Gloucester the land trends away S. W. and S. S. W. and forms a deep bay, the bottom of which I could but just see from the mast-head: it is very low, and a continuation of the low land which we had seen at the bottom of Repulse Bay. This bay I called EDGCUMBE BAY,

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Monday 4.

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Monday 4.

but without staying to look into it, we continued our course to the westward, for the farthest land we could see in that direction, which bore W. by N. $\frac{1}{2}$ N. and appeared very high. At noon, we were about three leagues from the shore, by observation in latitude $19^{\circ} 47' S.$ and Cape Gloucester bore S. $63^{\circ} E.$ distant seven leagues and an half. At six in the evening, we were abreast of the westernmost point just mentioned, at about three miles distance, and because it rises abruptly from the low lands which surround it, I called it CAPE UPSTART. It lies in latitude $19^{\circ} 39' S.$ longitude $212^{\circ} 32' W.$ fourteen leagues W.N.W. from Cape Gloucester, and is of a height sufficient to be seen at the distance of twelve leagues: inland there are some high hills or mountains, which, like the Cape, afford but a barren prospect. Having passed this Cape, we continued standing to the W.N.W. as the land lay, under an easy sail, having from sixteen to ten fathom, till two o'clock in the morning, when we fell into seven fathom; upon which we hauled our wind to the northward, judging ourselves to be very near land: at day-break, we found our conjecture to be true, being within little more than two leagues of it. In this part of the coast the land, being very low, is nearer than it appears to be, though it is diversified with here and there a hill. At noon, we were about four leagues from the land, in fifteen fathom water, and our latitude, by observation, was $19^{\circ} 12' S.$ Cape Upstart bearing S. $32^{\circ} 30' E.$ distant twelve leagues. About this time some very large columns of smoke were seen rising from the low lands. At sun-set, the preceding night, when we were close under Cape Upstart, the variation was nearly $9^{\circ} E.$ and at sun-rise this day, it was no more than $5^{\circ} 35'$; I judged therefore that it had been influenced by iron ore, or other magnetical matter, contained under the surface of the earth.

Tuesday 5.

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Wednes. 6.

We continued to steer W. N. W. as the land lay, with twelve or fourteen fathom water, till noon on the 6th, when our latitude, by observation, was $19^{\circ} 1' S.$ and we had the mouth of a bay all open, extending from S. $\frac{1}{2}$ E. to S. W. $\frac{1}{2}$ S. distant two leagues. This bay, which I named CLEVELAND BAY, appeared to be about five or six miles in extent every way: the east point I named CAPE CLEVELAND, and the west, which had the appearance of an island, MAGNETICAL ISLE, as we perceived that the compass did not traverse well when we were near it: they are both high, and so is the main land within them, the whole forming a surface the most rugged, rocky, and barren of any we had seen upon the coast; it was not however without inhabitants, for we saw smoke in several parts of the bottom of the bay. The northermost land that was in sight at this time, bore N. W. and it had the appearance of an island, for we could not trace the main land farther than W. by N. We steered W. N. W. keeping the main land on board, the outermost part of which, at sun-set, bore W. by N. but without it lay high land, which we judged not to be part of it. At day-break, we were abreast of the eastern part of this land, which we found to be a group of islands, lying about five leagues from the main: at this time, being between the two shores, we advanced slowly to the N. W. till noon, when our latitude, by observation, was $18^{\circ} 49' S.$ and our distance from the main about five leagues: the north west part of it bore from us N. by W. $\frac{1}{2}$ W. the islands extending from N. to E. and the nearest being distant about two miles: Cape Cleveland bore S. 50 E. distant eighteen leagues. Our soundings, in the course that we had sailed between this time and the preceding noon, were from fourteen to eleven fathom.

Thursday 7.

In the afternoon, we saw several large columns of smoke upon the main; we saw also some people and canoes, and

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Thursday 7.

upon one of the islands what had the appearance of cocoa nut-trees: as a few of these nuts would now have been very acceptable, I sent Lieutenant Hicks ashore, and with him went Mr. Banks and Dr. Solander, to see what refreshment could be procured, while I kept standing in for the island with the ship. About seven o'clock in the evening they returned, with an account that what we had taken for cocoa nut-trees, were a small kind of cabbage palm, and that, except about fourteen or fifteen plants, they had met with nothing worth bringing away. While they were ashore, they saw none of the people, but just as they had put off, one of them came very near the beach, and shouted with a loud voice; it was so dark that they could not see him, however they turned towards the shore, but when he heard the boat putting back, he ran away or hid himself, for they could not get a glimpse of him, and though they shouted he made no reply. After the return of the boats, we stood away N. by W. for the northernmost land in sight, of which we were abreast at three o'clock in the morning, having passed all the islands three or four hours before. This land, on account of its figure, I named POINT HILLOCK: it is of a considerable height, and may be known by a round hillock, or rock, which joins to the Point, but appears to be detached from it. Between this Cape and Magnetical Isle the shore forms a large bay, which I called HALIFAX BAY: before it lay the group of islands which has been just mentioned, and some others, at a less distance from the shore. By these islands the Bay is sheltered from all winds, and it affords good anchorage. The land near the beach, in the bottom of the Bay, is low and woody, but farther back it is one continued ridge of high land, which appeared to be barren and rocky. Having passed Point Hillock, we continued standing to the N. N. W. as the land trended, having the advantage of a light moon.

Friday 8.

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Friday 8.

moon. At six, we were abreast of a point of land which lies N. by W. $\frac{1}{2}$ W. distant eleven miles from Point Hillock, which I named CAPE SANDWICH. Between these two points the land is very high, and the surface is craggy and barren. Cape Sandwich may be known not only by the high craggy land over it, but by a small island which lies east of it, at the distance of a mile, and some others that lie about two leagues to the northward. From Cape Sandwich the land trends W. and afterwards N. forming a fine large bay, which I called ROCKINGHAM BAY, where there appears to be good shelter, and good anchorage, but I did not stay to examine it: I kept ranging along the shore to the northward, for a cluster of small islands, which lie off the northern point of the Bay. Between the three outermost of these islands, and those near the shore, I found a channel of about a mile broad, through which I passed, and upon one of the nearest islands we saw with our glasses about thirty of the natives; men, women, and children, all standing together, and looking with great attention at the ship; the first instance of curiosity that we had seen among them: they were all stark naked, with short hair, and of the same complexion with those that we had seen before. At noon, our latitude, by observation, was $17^{\circ} 59'$, and we were abreast of the north point of Rockingham Bay, which bore from us W. at the distance of about two miles. This boundary of the Bay is formed by an island of considerable height, which in the chart is distinguished by the name of DUNK ISLE, and which lies so near the shore as not to be easily distinguished from it. Our longitude was $213^{\circ} 57'$ W. Cape Sandwich bore S. by E. $\frac{1}{2}$ E. distant nineteen miles, and the northernmost land in sight N. $\frac{1}{2}$ W.: our depth of water for the last ten hours had not been more than sixteen, nor less than seven fathom. At sunset, the northern extremity of the land bore N. 25° W. and we kept.

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Friday 8.

kept our course N. by W. along the coast, at the distance of between three and four leagues, with an easy sail all night, having from twelve to fifteen fathom water.

Saturday 9.

At six o'clock in the morning, we were abreast of some small islands, which we called FRANKLAND'S ISLES, and which lie about two leagues distant from the main land. The most distant point in sight to the northward bore N. by W. $\frac{1}{2}$ W. and we thought it was part of the main, but afterwards found it to be an island of considerable height, and about four miles in circuit. Between this island and a point on the main, from which it is distant about two miles, I passed with the ship. At noon, we were in the middle of the channel, and by observation in the latitude of $16^{\circ} 57' S.$ with twenty fathom water. The point on the main, of which we were now abreast, I called CAPE GRAFTON: its latitude is $16^{\circ} 57' S.$ and longitude $214^{\circ} 6' W.$ and the land here, as well as the whole coast for about twenty leagues to the southward, is high, has a rocky surface, and is thinly covered with wood: during the night we had seen several fires, and about noon some people. Having hauled round Cape Grafton, we found the land trend away N. W. by W. and three miles to the westward of the Cape we found a bay, in which we anchored about two miles from the shore, in four fathom water with an ouzey bottom. The east point of the bay bore S. 74° E. the west point S. 83° W. and a low, green, woody island, which lies in the offing, N. 35° E. This island, which lies N. by E. $\frac{1}{2}$ E. distant three or four leagues from Cape Grafton, is called in the chart GREEN ISLAND.

As soon as the ship was brought to an anchor, I went ashore, accompanied by Mr. Banks and Dr. Solander. As my principal view was to procure some fresh water, and as the bottom of the bay was low land covered with mangroves, where

where it was not probable fresh water was to be found, I went out towards the Cape, and found two small streams, which however were rendered very difficult of access by the surf and rocks upon the shore: I saw also, as I came round the Cape, a small stream of water run over the beach, in a sandy cove, but I did not go in with the boat, because I saw that it would not be easy to land. When we got ashore, we found the country every where rising into steep rocky hills, and as no fresh water could conveniently be procured, I was unwilling to lose time by going in search of lower land elsewhere: we therefore made the best of our way back to the ship, and about midnight we weighed and stood to the N. W. having but little wind, with some showers of rain. At four in the morning, the breeze freshened at S. by E. and the weather became fair: we continued steering N. N. W. $\frac{1}{2}$ W. as the land lay, at about three leagues distance, with ten, twelve, and fourteen fathom water. At ten, we hauled off north, in order to get without a small low island, which lay at about two leagues distance from the main, and great part of which at this time, it being high water, was overflowed: about three leagues to the north west of this island, close under the main land, is another island, the land of which rises to a greater height, and which at noon bore from us N. 55 W. distant seven or eight miles. At this time, our latitude was $16^{\circ} 20' S.$ Cape Grafton bore S. 29 E. distant forty miles, and the northernmost point of land in sight N. 20 W.; our depth of water was fifteen fathom. Between this point and Cape Grafton, the shore forms a large, but not a very deep bay, which being discovered on Trinity Sunday, I called TRINITY BAY.

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Saturday 9.

Sunday 10.

C H A P. V.

Dangerous Situation of the Ship in her Course from Trinity Bay to Endeavour River.

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Sunday 10.

HITHERTO we had safely navigated this dangerous coast, where the sea in all parts conceals shoals that suddenly project from the shore, and rocks that rise abruptly like a pyramid from the bottom, for an extent of two and twenty degrees of latitude, more than one thousand three hundred miles; and therefore hitherto none of the names which distinguish the several parts of the country that we saw, are memorials of distress; but here we became acquainted with misfortune, and we therefore called the point which we had just seen farthest to the northward, CAPE TRIBULATION.

This Cape lies in latitude $16^{\circ} 6' S.$ and longitude $214^{\circ} 39' W.$ We steered along the shore N. by W. at the distance of between three and four leagues, having from fourteen to twelve, and ten fathom water: in the offing we saw two islands, which lie in latitude $16^{\circ} S.$ and about six or seven leagues from the main. At six in the evening, the northermost land in sight bore N. by W. $\frac{1}{2} W.$ and two low woody islands, which some of us took to be rocks above water, bore N. $\frac{1}{2} W.$ At this time we shortened sail, and hauled off shore E. N. E. and N. E. by E. close upon a wind, for it was my design to stretch off all night, as well to avoid the danger we saw ahead, as to see whether any islands lay in the offing, especially

as

as we were now near the latitude assigned to the islands which were discovered by Quiros, and which some geographers, for what reason I know not, have thought fit to join to this land. We had the advantage of a fine breeze, and a clear moonlight night, and in standing off from fix till near nine o'clock, we deepened our water from fourteen to twenty-one fathom, but while we were at supper it suddenly shoaled, and we fell into twelve, ten, and eight fathom, within the space of a few minutes; I immediately ordered every body to their station, and all was ready to put about and come to an anchor, but meeting at the next cast of the lead with deep water again, we concluded that we had gone over the tail of the shoals which we had seen at sun-set, and that all danger was past: before ten, we had twenty and one and twenty fathom, and this depth continuing, the gentlemen left the deck in great tranquility, and went to bed; but a few minutes before eleven, the water shallowed at once from twenty to seventeen fathom, and before the lead could be cast again, the ship struck, and remained immovable, except by the heaving of the surge, that beat her against the craggs of the rock upon which she lay. In a few moments every body was upon the deck, with countenances which sufficiently expressed the horrors of our situation. We had stood off the shore three hours and a half, with a pleasant breeze, and therefore knew that we could not be very near it, and we had too much reason to conclude that we were upon a rock of coral, which is more fatal than any other, because the points of it are sharp, and every part of the surface so rough as to grind away whatever is rubbed against it, even with the gentlest motion. In this situation all the sails were immediately taken in, and the boats hoisted out to examine the depth of water round the ship: we soon discovered that our fears had not aggravated our misfor-

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Sunday 10.

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Sunday 10.

tune, and that the vessel had been lifted over a ledge of the rock, and lay in a hollow within it: in some places there was from three to four fathom, and in others not so many feet. The ship lay with her head to the N. E.; and at the distance of about thirty yards on the starboard side, the water deepened to eight, ten, and twelve fathom. As soon as the long-boat was out, we struck our yards and top-masts, and carried out the stream anchor on the starboard bow, got the coasting anchor and cable into the boat, and were going to carry it out the same way; but upon founding a second time round the ship, the water was found to be deepest astern: the anchor therefore was carried out from the starboard quarter instead of the starboard bow, that is, from the stern instead of the head, and having taken ground, our utmost force was applied to the capstern, hoping that if the anchor did not come home, the ship would be got off, but to our great misfortune and disappointment we could not move her: during all this time she continued to beat with great violence against the rock, so that it was with the utmost difficulty that we kept upon our legs; and to complete the scene of distress, we saw by the light of the moon the sheathing boards from the bottom of the vessel floating away all round her, and at last her false keel, so that every moment was making way for the sea to rush in which was to swallow us up. We had now no chance but to lighten her, and we had lost the opportunity of doing that to the greatest advantage, for unhappily we went on shore just at high water, and by this time it had considerably fallen, so that after she should be lightened so as to draw as much less water as the water had sunk, we should be but in the same situation as at first; and the only alleviation of this circumstance was, that as the tide ebbed the ship settled to the rocks, and was not beaten against them with so much violence. We had indeed some hope from the

next

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Sunday 10.

next tide, but it was doubtful whether she would hold together so long, especially as the rock kept grating her bottom under the starboard bow with such force as to be heard in the fore store-room. This however was no time to indulge conjecture, nor was any effort remitted in despair of success: that no time might be lost, the water was immediately started in the hold, and pumped up; six of our guns, being all we had upon the deck, our iron and stone ballast, casks, hoop staves, oil jars, decayed stores, and many other things that lay in the way of heavier materials, were thrown overboard with the utmost expedition, every one exerting himself with an alacrity almost approaching to cheerfulness, without the least repining or discontent; yet the men were so far impressed with a sense of their situation, that not an oath was heard among them, the habit of profaneness, however strong, being instantly subdued, by the dread of incurring guilt when death seemed to be so near.

Monday 11.

While we were thus employed, day broke upon us, and we saw the land at about eight leagues distance, without any island in the intermediate space, upon which, if the ship should have gone to pieces, we might have been set ashore by the boats, and from which they might have taken us by different turns to the main: the wind however gradually died away, and early in the forenoon it was a dead calm; if it had blown hard, the ship must inevitably have been destroyed. At eleven in the forenoon we expected high water, and anchors were got out, and every thing made ready for another effort to heave her off if she should float, but to our inexpressible surprize and concern she did not float by a foot and a half, though we had lightened her near fifty ton, so much did the day-tide fall short of that in the night. We now proceeded to lighten her still more, and threw overboard every thing that it was possible for us to

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Monday 11.

spare: hitherto she had not admitted much water, but as the tide fell, it rushed in so fast, that two pumps, incessantly worked, could scarcely keep her free. At two o'clock, she lay heeling two or three streaks to starboard, and the pin-nace, which lay under her bows, touched the ground: we had now no hope but from the tide at midnight, and to pre-pare for it we carried out our two bower anchors, one on the starboard quarter, and the other right a-stern, got the blocks and tackle which were to give us a purchase upon the cables in order, and brought the falls, or ends of them, in abaft, straining them tight, that the next effort might operate upon the ship, and by shortening the length of the cable between that and the anchors, draw her off the ledge upon which she rested, towards the deep water. About five o'clock in the afternoon, we observed the tide begin to rise, but we ob-served at the same time that the leak increased to a most alarming degree, so that two more pumps were manned, but unhappily only one of them would work: three of the pumps however were kept going, and at nine o'clock the ship righted, but the leak had gained upon us so confide-rably, that it was imagined she must go to the bottom as soon as she ceased to be supported by the rock: this was a dreadful circumstance, so that we anticipated the floating of the ship not as an earnest of deliverance, but as an event that would probably precipitate our destruction. We well knew that our boats were not capable of carrying us all on shore, and that when the dreadful crisis should arrive, as all com-mand and subordination would be at an end, a contest for preference would probably ensue, that would increase the horrors even of shipwreck, and terminate in the destruction of us all by the hands of each other; yet we knew that if any should be left on board to perish in the waves, they would probably suffer less upon the whole than those who should

should get on shore, without any lasting or effectual defence against the natives, in a country, where even nets and fire-arms would scarcely furnish them with food; and where, if they should find the means of subsistence, they must be condemned to languish out the remainder of life in a desolate wilderness, without the possession, or even hope, of any domestic comfort, and cut off from all commerce with mankind, except the naked savages who prowled the desert, and who perhaps were some of the most rude and uncivilized upon the earth.

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Monday 11.

To those only who have waited in a state of such suspense, death has approached in all his terrors; and as the dreadful moment that was to determine our fate came on, every one saw his own sensations pictured in the countenances of his companions: however, the capstan and windlace were manned with as many hands as could be spared from the pumps, and the ship floating about twenty minutes after ten o'clock, the effort was made, and she was heaved into deep water. It was some comfort to find that she did not now admit more water than she had done upon the rock; and though, by the gaining of the leak upon the pumps, there was no less than three feet nine inches water in the hold, yet the men did not relinquish their labour, and we held the water as it were at bay; but having now endured excessive fatigue of body and agitation of mind for more than four and twenty hours, and having but little hope of succeeding at last, they began to flag: none of them could work at the pump more than five or six minutes together, and then, being totally exhausted, they threw themselves down upon the deck, though a stream of water was running over it from the pumps between three and four inches deep; when those who succeeded them had worked their spell, and were exhausted in their turn, they threw themselves down in the same manner, and the others started

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Monday 11.

started up again, and renewed their labour; thus relieving each other till an accident was very near putting an end to their efforts at once. The planking which lines the inside of the ship's bottom is called the cieling, and between this, and the outside planking, there is a space of about eighteen inches: the man who till this time had attended the well to take the depth of water, had taken it only to the cieling, and gave the measure accordingly; but he being now relieved, the person who came in his stead, reckoned the depth to the outside planking, by which it appeared in a few minutes to have gained upon the pumps eighteen inches, the difference between the planking without and within. Upon this, even the bravest was upon the point of giving up his labour with his hope, and in a few minutes every thing would have been involved in all the confusion of despair. But this accident, however dreadful in its first consequences, was eventually the cause of our preservation: the mistake was soon detected, and the sudden joy which every man felt upon finding his situation better than his fears had suggested, operated like a charm, and seemed to possess him with a strong belief that scarcely any real danger remained. New confidence and new hope, however founded, inspired new vigour; and though our state was the same as when the men first began to slacken in their labour, through weariness and despondency, they now renewed their efforts with such alacrity and spirit, that before eight o'clock in the morning the leak was so far from having gained upon the pumps, that the pumps had gained considerably upon the leak. Every body now talked of getting the ship into some harbour, as a thing not to be doubted, and as hands could be spared from the pumps, they were employed in getting up the anchors: the stream anchor and best bower we had taken on board; but it was found impossible to save the little bower, and therefore it

was

was cut away at a whole cable: we lost also the cable of the stream anchor among the rocks; but in our situation these were trifles which scarcely attracted our notice. Our next business was to get up the fore-topmast and fore-yard, and warp the ship to the south-east, and at eleven, having now a breeze from the sea, we once more got under sail and stood for the land.

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Monday 11.

It was however impossible long to continue the labour by which the pumps had been made to gain upon the leak, and as the exact situation of it could not be discovered, we had no hope of stopping it within. In this situation, Mr. Monkhouse, one of my midshipmen, came to me and proposed an expedient that he had once seen used on board a merchant ship, which sprung a leak that admitted above four feet water an hour, and which by this expedient was brought safely from Virginia to London; the master having such confidence in it, that he took her out of harbour, knowing her condition, and did not think it worth while to wait till the leak could be otherwise stopped. To this man, therefore, the care of the expedient, which is called fothering the ship, was immediately committed, four or five of the people being appointed to assist him, and he performed it in this manner: He took a lower studding sail, and having mixed together a large quantity of oakham and wool, chopped pretty small, he stitched it down in handfuls upon the sail, as lightly as possible, and over this he spread the dung of our sheep and other filth; but horse dung, if we had had it, would have been better. When the sail was thus prepared, it was hauled under the ship's bottom by ropes, which kept it extended, and when it came under the leak, the suction which carried in the water, carried in with it the oakham and wool from the surface of the sail, which in other parts the water was

Tuesday 12.

not

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Tuesday 12.

not sufficiently agitated to wash off. By the success of this expedient our leak was so far reduced, that instead of gaining upon three pumps, it was easily kept under with one. This was a new source of confidence and comfort; the people could scarcely have expressed more joy if they had been already in port; and their views were so far from being limited to running the ship ashore in some harbour, either of an island or the main, and building a vessel out of her materials, to carry us to the East Indies, which had so lately been the utmost object of our hope, that nothing was now thought of but ranging along the shore in search of a convenient place to repair the damage she had sustained, and then prosecuting the voyage upon the same plan as if nothing had happened. Upon this occasion I must observe, both in justice and gratitude to the ship's company, and the Gentlemen on board, that although in the midst of our distress every one seemed to have a just sense of his danger, yet no passionate exclamations, or frantic gestures, were to be heard or seen; every one appeared to have the perfect possession of his mind, and every one exerted himself to the uttermost, with a quiet and patient perseverance, equally distant from the tumultuous violence of terror, and the gloomy inactivity of despair.

In the mean time, having light airs at E.S.E. we got up the main-topmast, and main-yard, and kept edging in for the land, till about six o'clock in the evening, when we came to an anchor in seventeen fathom water, at the distance of seven leagues from the shore, and one from the ledge of rocks upon which we had struck.

This ledge or shoal lies in latitude $15^{\circ} 45'$ S. and between six and seven leagues from the main. It is not however the only shoal on this part of the coast, especially to the north-

ward; and at this time we saw one to the southward, the tail of which we passed over, when we had uneven soundings about two hours before we struck. A part of this shoal is always above water, and has the appearance of white sand: a part also of that upon which we had lain is dry at low water, and in that place consists of sand stones; but all the rest of it is a coral rock.

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Tuesday 12.

While we lay at anchor for the night, we found that the ship made about fifteen inches water an hour, from which no immediate danger was to be apprehended; and at six o'clock in the morning, we weighed and stood to the N. W. still edging in for the land with a gentle breeze at S. S. E. At nine we passed close without two small islands that lie in latitude $15^{\circ} 41' S.$ and about four leagues from the main: to reach these islands had, in the height of our distress, been the object of our hope, or perhaps rather of our wishes, and therefore I called them HOPE ISLANDS. At noon we were about three leagues from the land, and in latitude $15^{\circ} 37' S.$; the northernmost part of the main in sight bore N. $30^{\circ} W.$; and Hope Islands extended from S. $30^{\circ} E.$ to S. $40^{\circ} E.$ In this situation we had twelve fathom water, and several sand-banks without us. At this time the leak had not increased; but that we might be prepared for all events, we got the sail ready for another fothering. In the afternoon, having a gentle breeze at S. E. by E. I sent out the Master with two boats, as well to sound ahead of the ship, as to look out for a harbour where we might repair our defects, and put the ship in a proper trim. At three o'clock, we saw an opening that had the appearance of an harbour, and stood off and on while the boats examined it; but they soon found that there was not depth of water in it sufficient for the ship. When it was near sunset, there being many shoals about us, we

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anchored in four fathom, at the distance of about two miles from the shore, the land extending from N. $\frac{1}{2}$ E. to S. by E. $\frac{1}{2}$ E. The pinnacle was still out with one of the mates; but at nine o'clock she returned, and reported, that about two leagues to leeward she had discovered just such a harbour as we wanted, in which there was a sufficient rise of water; and every other convenience that could be desired, either for laying the ship ashore, or heaving her down.

Thursday 14.

In consequence of this information, I weighed at six o'clock in the morning; and having sent two boats ahead, to lie upon the shoals that we saw in our way, we ran down to the place; but notwithstanding our precaution, we were once in three fathom water. As soon as these shoals were passed, I sent the boats to lie in the channel that led to the harbour, and by this time it began to blow. It was happy for us that a place of refuge was at hand; for we soon found that the ship would not work, having twice missed stays: our situation, however, though it might have been much worse, was not without danger; we were entangled among shoals, and I had great reason to fear being driven to leeward, before the boats could place themselves so as to prescribe our course. I therefore anchored in four fathom, about a mile from the shore, and then made the signal for the boats to come on board. When this was done I went myself and buoyed the channel, which I found very narrow; the harbour also I found smaller than I expected, but most excellently adapted to our purpose; and it is remarkable, that in the whole course of our voyage we had seen no place which, in our present circumstances, could have afforded us the same relief. At noon, our latitude was $15^{\circ} 26' S$. During all the rest of this day, and the whole night, it blew too fresh for us to venture from our anchor and run into the harbour; and for

our

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Thursday 14.

Friday 15.
Saturday 16.

our farther security, we got down the top-gallant yards, unbent the mainfail and some of the small fails; got down the fore-top-gallant mast, and the gibb boom, and sprit-fail, with a view to lighten the ship forwards as much as possible, in order to come at her leak, which we supposed to be somewhere in that part; for in all the joy of our unexpected deliverance, we had not forgot that at this time there was nothing but a lock of wool between us and destruction. The gale continuing, we kept our station all the 15th. On the 16th, it was somewhat more moderate; and about six o'clock in the morning, we hove the cable short, with a design to get under fail, but were obliged to desist, and veer it out again. It is remarkable that the sea breeze, which blew fresh when we anchored, continued to do so almost every day while we stayed here; it was calm only while we were upon the rock, except once; and even the gale that afterwards wafted us to the shore, would then certainly have beaten us to pieces. In the evening of the preceding day, we had observed a fire near the beach over against us; and as it would be necessary for us to stay sometime in this place, we were not without hope of making an acquaintance with the people. We saw more fires upon the hills to-day, and with our glasses discovered four Indians going along the shore, who stopped, and made two fires; but for what purpose it was impossible we should guess.

The scurvy now began to make its appearance among us, with many formidable symptoms. Our poor Indian, Tupia, who had some time before complained that his gums were sore and swelled, and who had taken plentifully of our lemon juice by the Surgeon's direction, had now livid spots upon his legs, and other indubitable testimonies that the disease had made a rapid progress, notwithstanding all our remedies, among which the bark had been liberally administered.

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Saturday 16.

nistered. Mr. Green, our astronomer, was also declining; and these, among other circumstances, imbibited the delay which prevented our going ashore.

Sunday 17.

In the morning of the 17th, though the wind was still fresh, we ventured to weigh, and push in for the harbour; but in doing this we twice run the ship aground: the first time she went off without any trouble, but the second time she stuck fast. We now got down the fore yard, fore top-masts, and booms, and taking them overboard, made a raft of them alongside of the ship. The tide was happily rising, and about one o'clock in the afternoon, she floated. We soon warped her into the harbour, and having moored her alongside of a steep beach to the south, we got the anchors, cables, and all the hawsers on shore before night.



W. H. B. 1811

C H A P. VI.

Transactions while the Ship was refitting in Endeavour River: A Description of the adjacent Country, its Inhabitants, and Productions.

IN the morning of Monday the 18th, a stage was made from the ship to the shore, which was so bold that she floated at twenty feet distance: two tents were also set up, one for the sick, and the other for stores and provisions, which were landed in the course of the day. We also landed all the empty water casks, and part of the stores. As soon as the tent for the sick was got ready for their reception, they were sent ashore to the number of eight or nine, and the boat was dispatched to haul the seine, in hopes of procuring some fish for their refreshment; but she returned without success. In the mean time, I climbed one of the highest hills among those that overlooked the harbour, which afforded by no means a comfortable prospect: the low land near the river is wholly over-run with mangroves, among which the salt-water flows every tide; and the high land appeared to be every where stoney and barren. In the mean time Mr. Banks had also taken a walk up the country, and met with the frames of several old Indian houses, and places where they had dressed shell-fish; but they seemed not to have been frequented for some months. Tupia, who had employed himself in angling, and lived intirely upon what he caught, recovered in a surprising degree; but Mr. Green still continued to be extremely ill.

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Monday 18.

The

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Tuesday 19.

The next morning I got the four remaining guns out of the hold, and mounted them upon the quarter-deck; I also got a spare anchor, and anchor-stock ashore, and the remaining part of the stores and ballast that were in the hold: set up the smith's forge, and employed the armourer and his mate to make nails and other necessaries for the repair of the ship. In the afternoon, all the officers' stores and the ground tier of water were got out; so that nothing remained in the fore and main hold, but the coals, and a small quantity of stone ballast. This day Mr. Banks crossed the river to take a view of the country on the other side: he found it consist principally of sand-hills, where he saw some Indian houses, which appeared to have been very lately inhabited. In his walk, he met with vast flocks of pigeons and crows: of the pigeons, which were exceedingly beautiful, he shot several; but the crows, which were exactly like those in England, were so shy that he could not get within reach of them.

Wednes. 20.

On the 20th, we landed the powder, and got out the stone ballast and wood, which brought the ship's draught of water to eight feet ten inches forward, and thirteen feet abaft; and this I thought, with the difference that would be made by trimming the coals aft, would be sufficient; for I found that the water rose and fell perpendicularly eight feet at the spring-tides: but as soon as the coals were trimmed from over the leak, we could hear the water rush in a little abaft the foremast, about three feet from the keel: this determined me to clear the hold intirely. This evening, Mr. Banks observed that in many parts of the inlet there were large quantities of pumice stones, which lay at a considerable distance above high-water mark; whither they might have been carried either by the freshes or extraordinary high tides, for there could be no doubt but that they came from the sea.

The next morning we went early to work, and by four o'clock in the afternoon had got out all the coals, cast the moorings loose, and warped the ship a little higher up the harbour to a place which I thought most convenient for laying her ashore in order to stop the leak. Her draught of water forward was now seven feet nine inches, and abaft thirteen feet six inches. At eight o'clock, it being high-water, I hauled her bow close ashore; but kept her stern afloat, because I was afraid of neiping her; it was however necessary to lay the whole of her as near the ground as possible.

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Thursday 21.

At two o'clock in the morning of the 22d, the tide left her, and gave us an opportunity to examine the leak, which we found to be at her floor heads, a little before the starboard fore-chains. In this place the rocks had made their way through four planks, and even into the timbers; three more planks were much damaged, and the appearance of these breaches was very extraordinary: there was not a splinter to be seen, but all was as smooth, as if the whole had been cut away by an instrument: the timbers in this place were happily very close, and if they had not, it would have been absolutely impossible to have saved the ship. But after all, her preservation depended upon a circumstance still more remarkable: in one of the holes, which was big enough to have sunk us, if we had had eight pumps instead of four, and been able to keep them incessantly going, was in great measure plugged up by a fragment of the rock, which, after having made the wound, was left sticking in it; so that the water which at first had gained upon our pumps, was what came in at the interstices, between the stone and the edges of the hole that received it. We found also several pieces of the fothering, which had made their way between the
timbers,

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Friday 22.

timbers, and in a great measure stopped those parts of the leak which the stone had left open. Upon further examination, we found that, besides the leak, considerable damage had been done to the bottom; great part of the sheathing was gone from under the larboard bow; a considerable part of the false keel was also wanting, and these indeed we had seen swim away in fragments from the vessel, while she lay beating against the rock: the remainder of it was in so shattered a condition that it had better have been gone, and the fore foot and main keel were also damaged, but not so as to produce any immediate danger: what damage she might have received abaft could not yet be exactly known, but we had reason to think it was not much, as but little water made its way into her bottom, while the tide kept below the leak which has already been described. By nine o'clock in the morning the carpenters got to work upon her, while the smiths were busy in making bolts and nails. In the mean time, some of the people were sent on the other side of the water to shoot pigeons for the sick, who at their return reported that they had seen an animal as large as a greyhound, of a slender make, a mouse colour, and extremely swift; they discovered also many Indian houses, and a fine stream of fresh water.

Saturday 23.

The next morning, I sent a boat to haul the seine; but at noon it returned with only three fish, and yet we saw them in plenty leaping about the harbour. This day the carpenter finished the repairs that were necessary on the starboard side; and at nine o'clock in the evening, we heeled the ship the other way, and hauled her off about two feet for fear of neiping. This day almost every body had seen the animal which the pigeon-shooters had brought an account of the day before; and one of the seamen, who had been rambling in the woods, told us at his return, that he verily believed
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he had seen the devil: we naturally enquired in what form he had appeared, and his answer was in so singular a stile that I shall set down his own words; "He was, says John, as large as a one gallon keg, and very like it; he had horns and wings, yet he crept so slowly through the grafs, that if I had not been *afeard* I might have touched him." This formidable apparition we afterwards discovered to have been a batt; and the batts here must be acknowledged to have a frightful appearance, for they are nearly black, and full as large as a partridge; they have indeed no horns, but the fancy of a man who thought he saw the devil might easily supply that defect.

Sunday 24.

Early on the 24th, the carpenters began to repair the sheathing under the larboard bow, where we found two planks cut about half through; and in the mean time I sent a party of men, under the direction of Mr. Gore, in search of refreshments for the sick: this party returned about noon with a few palm cabbages, and a bunch or two of wild plantains; the plantains were the smallest I had ever seen, and the pulp, though it was well tasted, was full of small stones. As I was walking this morning at a little distance from the ship, I saw myself one of the animals which had been so often described: it was of a light mouse colour, and in size and shape very much resembling a greyhound; it had a long tail also, which it carried like a greyhound; and I should have taken it for a wild dog, if instead of running, it had not leapt like a hare or deer: its legs were said to be very slender, and the print of its foot to be like that of a goat; but where I saw it the grafs was so high that the legs were concealed, and the ground was too hard to receive the track. Mr. Banks also had an imperfect view of this animal, and was of opinion that its species was hitherto unknown.

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Sunday 24.

After the ship was hauled ashore, all the water that came into her of course went backwards; so that although she was dry forward, she had nine feet water abaft: as in this part therefore her bottom could not be examined on the inside, I took the advantage of the tide being out this evening to get the master and two of the men to go under her, and examine her whole larboard side without. They found the sheathing gone about the floor heads abreast of the main-mast, and part of a plank a little damaged; but all agreed that she had received no other material injury. The loss of her sheathing alone was a great misfortune, as the worm would now be let into her bottom, which might expose us to great inconvenience and danger; but as I knew no remedy for the mischief but heaving her down, which would be a work of immense labour and long time, if practicable at all in our present situation, I was obliged to be content. The carpenters however continued to work under her bottom in the evening till they were prevented by the tide; the morning tide did not ebb out far enough to permit them to work at all, for we had only one tolerable high and low tide in four and twenty hours, as indeed we had experienced when we lay upon the rock. The position of the ship, which threw the water in her abaft, was very near depriving the world of all the knowledge which Mr. Banks had endured so much labour, and so many risks, to procure; for he had removed the curious collection of plants which he made during the whole voyage, into the bread room, which lies in the after part of the ship, as a place of the greatest security; and nobody having thought of the danger to which laying her head so much higher than the stern would expose them, they were this day found under water. Most of them however were, by indefatigable care and attention,

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restored

restored to a state of preservation, but some were entirely spoilt and destroyed.

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The 25th was employed in filling water and over-hauling the rigging, and at low water the carpenters finished the repairs under the larboard bow, and every other place which the tide would permit them to come at; some casks were then lashed under her bows to facilitate her floating, and at night, when it was high water, we endeavoured to heave her off, but without success, for some of the casks that were lashed to her gave way.

Monday 25.

The morning of the 26th was employed in getting more casks ready for the same purpose, and in the afternoon we lashed no less than eight and thirty under the ship's bottom, but to our great mortification these also proved ineffectual, and we found ourselves reduced to the necessity of waiting till the next spring-tide.

Tuesday 26.

This day, some of our gentlemen who had made an excursion into the woods, brought home the leaves of a plant, which was thought to be the same that in the West Indies is called cocos, but upon trial, the roots proved too acrid to be eaten; the leaves however were little inferior to spinnage. In the place where these plants were gathered, grew plenty of the cabbage trees which have occasionally been mentioned before, a kind of wild plantain, the fruit of which was so full of stones as scarcely to be eatable; another fruit was also found about the size of a small golden pippin, but flatter, and of a deep purple colour: when first gathered from the tree it was very hard and disagreeable, but after being kept a few days became soft, and tasted very much like an indifferent damascene.

The next morning we began to move some of the weight from the after-part of the ship forward, to ease her; in the mean time the armourer continued to work at the forge, the

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carpenter was busy in caulking the ship, and the men employed in filling water and over-hauling the rigging: in the forenoon, I went myself in the pinnace up the harbour, and made several hauls with the seine, but caught only between twenty and thirty fish, which were given to the sick and convalescent.

Thursday 28.

On the 28th, Mr. Banks went with some of the seamen up the country, to shew them the plant which in the West Indies is called Indian kale, and which served us for greens. Tupia had much meliorated the root of the coccos, by giving them a long dressing in his country oven, but they were so small that we did not think them an object for the ship. In their walk they found one tree which had been notched for the convenience of climbing it, in the same manner with those we had seen in Botany Bay: they saw also many nests of white ants, which resemble those of the East Indies, the most pernicious insects in the world. The nests were of a pyramidical figure, from a few inches to six feet high, and very much resembled the stones in England, which are said to be monuments of the Druids. Mr. Gore, who was also this day four or five miles up the country, reported that he had seen the footsteps of men, and tracked animals of three or four different sorts, but had not been fortunate enough to see either man or beast.

Friday 29.

At two o'clock in the morning of the 29th, I observed, in conjunction with Mr. Green, an emerfion of Jupiter's first fatellite; the time here was $2^h 18' 53''$, which gave the longitude of this place $214^{\circ} 42' 30''$ W.: its latitude is $15^{\circ} 26'$ S. At break of day, I sent the boat out again with the seine, and in the afternoon, it returned with as much fish as enabled me to give every man a pound and an half. One of my midshipmen, an American, who was this day abroad with his gun, reported that he had seen a wolf, exactly like those
which

which he had been used to see in his own country, and that he had shot at it, but did not kill it.

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The next morning, encouraged by the success of the day before, I sent the boat again to haul the seine, and another party to gather greens: I sent also some of the young gentlemen to take a plan of the harbour, and went myself upon a hill, which lies over the south point, to take a view of the sea. At this time it was low water, and I saw, with great concern, innumerable sand banks and shoals lying all along the coast in every direction. The innermost lay about three or four miles from the shore, the outermost extended as far as I could see with my glass, and many of them did but just rise above water. There was some appearance of a passage to the northward, and I had no hope of getting clear but in that direction, for as the wind blows constantly from the S. E. it would have been difficult, if not impossible, to return back to the southward.

Saturday 30.

Mr. Gore reported, that he had this day seen two animals like dogs, of a straw colour, that they ran like a hare, and were about the same size. In the afternoon, the people returned from hauling the seine, with still better success than before, for I was now able to distribute two pounds and an half to each man: the greens that had been gathered I ordered to be boiled among the peas, and they made an excellent mess, which, with two copious supplies of fish, afforded us unspeakable refreshment.

The next day, July the 1st, being Sunday, every body had liberty to go ashore, except one from each mess, who were again sent out with the seine. The seine was again equally successful, and the people who went up the country gave an account of having seen several animals, though none of them were to be caught. They saw a fire also about a mile up

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up the river, and Mr. Gore, the Second Lieutenant, picked up the husk of a cocoa nut, which had been cast upon the beach, and was full of barnacles: this probably might come from some island to windward, perhaps from the Terra del Espirito Santo of Quiros, as we were now in the latitude where it is said to lie. This day the thermometer in the shade rose to 87, which was higher than it had been on any day since we came upon this coast.

Monday 2.

Early the next morning, I sent the Master in the pinnace, out of the harbour, to sound about the shoals in the offing, and look for a channel to the northward: at this time we had a breeze from the land, which continued till about nine o'clock, and was the first we had had since our coming into the river. At low water we lashed some empty casks under the ship's bows, having some hope that as the tides were rising she would float the next high water. We still continued to fish with great success, and at high water we again attempted to heave the ship off, but our utmost efforts were still ineffectual.

Tuesday 3.

The next day at noon, the Master returned, and reported, that he had found a passage out to sea between the shoals, and described its situation. The shoals, he said, consisted of coral rocks, many of which were dry at low water, and upon one of which he had been ashore. He found here some cockles of so enormous a size that one of them was more than two men could eat, and a great variety of other shell-fish, of which he brought us a plentiful supply: in the evening, he had also landed in a bay about three leagues to the northward of our station, where he disturbed some of the natives who were at supper: they all fled with the greatest precipitation at his approach, leaving some fresh sea eggs, and a fire ready kindled behind them, but there was neither
house

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house nor hovel near the place. We observed, that although the shoals that lie just within sight of the coast, abound with shell-fish, which may be easily caught at low water; yet we saw no such shells about the fire places on shore. This day an allegator was seen to swim about the ship for some time, and at high water we made another effort to float her, which happily succeeded: we found however that by lying so long with her head a-ground, and her stern a-float, she had sprung a plank between decks, a-breast of the main chains, so that it was become necessary to lay her ashore again.

The next morning was employed in trimming her upon an even keel, and in the afternoon, having warped her over, and waited for high water, we laid her ashore on the sand bank on the south side of the river, for the damage she had received already from the great descent of the ground, made me afraid to lay her broad-side to the shore in the same place from which we had just floated her. I was now very desirous to make another trial to come at her bottom, where the sheathing had been rubbed off, but though she had scarcely four feet water under her, when the tide was out, yet that part was not dry.

Wednesday 4.

On the 5th, I got one of the carpenter's crew, a man in whom I could confide, to go down again to the ship's bottom, and examine the place. He reported, that three streaks of the sheathing, about eight feet long, were wanting, and that the main plank had been a little rubbed; this account perfectly agreed with the report of the Master, and others, who had been under her bottom before: I had the comfort however to find the carpenter of opinion that this would be of little consequence, and therefore the other damage being repaired, she was again floated at high water, and moored along-side the beach, where the stores had been deposited:

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deposited; we then went to work to take the stores on board, and put her in a condition for the sea. This day, Mr. Banks crossed to the other side of the harbour, where, as he walked along a sandy beach, he found innumerable fruits, and many of them such as no plants which he had discovered in this country produced: among others were some coconuts, which Tupia said had been opened by a kind of crab, which from his description we judged to be the same that the Dutch call *Beurs Krabbe*, and which we had not seen in these seas. All the vegetable substances which he found in this place, were encrusted with marine productions, and covered with barnacles; a sure sign that they must have come far by sea, and, as the trade-wind blows right upon the shore, probably from Terra del Espirito Santo, which has been mentioned already.

Friday 6.

The next morning, Mr. Banks, with Lieutenant Gore, and three men, set out in a small boat up the river, with a view to spend two or three days in an excursion, to examine the country, and kill some of the animals which had been so often seen at a distance.

Saturday 7.

On the 7th, I sent the Master again out to sound about the shoals, the account which he had brought me of a channel being by no means satisfactory; and we spent the remainder of this day, and the morning of the next, in fishing, and other necessary occupations.

Sunday 8.

About four o'clock in the afternoon, Mr. Banks and his party returned, and gave us an account of their expedition. Having proceeded about three leagues among swamps and mangroves, they went up into the country, which they found to differ but little from what they had seen before: they pursued their course therefore up the river, which at length was contracted into a narrow channel, and was bounded, not by swamps and mangroves, but by steep banks,

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banks, that were covered with trees of a most beautiful verdure, among which was that which in the West Indies is called *Mohoe*, or the bark tree, the *hibiscus tiliaceus*; the land within was in general low, and had a thick covering of long grafs: the soil seemed to be such as promised great fertility, to any who should plant and improve it. In the course of the day, Tupia saw an animal, which, by his description, Mr. Banks judged to be a wolf: they also saw three other animals, but could neither catch nor kill one of them, and a kind of bat, as large as a partridge, but this also eluded all their diligence and skill. At night, they took up their lodging close to the banks of the river, and made a fire, but the musquitos swarmed about them in such numbers, that their quarters were almost untenable; they followed them into the smoke, and almost into the fire, which, hot as the climate was, they could better endure than the stings of these insects, which were an intolerable torment. The fire, the flies, and the want of a better bed than the ground, rendered the night extremely uncomfortable, so that they passed it not in sleep, but in restless wishes for the return of day. With the first dawn they set out in search of game, and in a walk of many miles, they saw four animals of the same kind, two of which Mr. Banks's greyhound fairly chased, but they threw him out at a great distance, by leaping over the long thick grafs, which prevented his running: this animal was observed not to run upon four legs, but to bound or hop forward upon two, like the *Jerbua*, or *Mus Jaculus*. About noon, they returned to the boat, and again proceeded up the river, which was soon contracted into a fresh water brook, where, however, the tide rose to a considerable height: as evening approached, it became low water, and it was then so shallow that they were obliged to get out of the boat and drag her along, till they could find a place in

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which they might, with some hope of rest, pass the night. Such a place at length offered, and while they were getting the things out of the boat, they observed a smoke at the distance of about a furlong: as they did not doubt but that some of the natives, with whom they had so long and earnestly desired to become personally acquainted, were about the fire, three of the party went immediately towards it, hoping that so small a number would not put them to flight: when they came up to the place, however, they found it deserted, and therefore they conjectured that before they had discovered the Indians, the Indians had discovered them. They found the fire still burning, in the hollow of an old tree that was become touch-wood, and several branches of trees newly broken down, with which children appeared to have been playing: they observed also many foot-steps upon the sand, below high water mark, which were certain indications that the Indians had been recently upon the spot. Several houses were found at a little distance, and some ovens dug in the ground, in the same manner as those of Otaheite, in which victuals appeared to have been dressed since the morning, and, scattered about them, lay some shells of a kind of clam, and some fragments of roots, the refuse of the meal. After regretting their disappointment, they repaired to their quarters, which was a broad sand bank, under the shelter of a bush. Their beds were plantain leaves, which they spread upon the sand, and which were as soft as a mattress; their cloaks served them for bed-clothes, and some bunches of grass for pillows: with these accommodations they hoped to pass a better night than the last, especially as, to their great comfort, not a musquito was to be seen. Here then they lay down, and, such is the force of habit, they resigned themselves to sleep, without once reflecting upon the probability and danger of being found by the Indians in
that

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that situation. If this appears strange, let us for a moment reflect, that every danger, and every calamity, after a time becomes familiar, and loses its effect upon the mind. If it were possible that a man should first be made acquainted with his mortality, or even with the inevitable debility and infirmities of old age, when his understanding had arrived at its full strength, and life was endeared by the enjoyments of youth, and vigour, and health, with what an agony of terror and distress would the intelligence be received! yet, being gradually acquainted with these mournful truths, by insensible degrees, we scarce know when, they lose all their force, and we think no more of the approach of old age and death, than these wanderers of an unknown desert did of a less obvious and certain evil, the approach of the native savages, at a time when they must have fallen an easy prey to their malice or their fears. And it is remarkable, that the greater part of those who have been condemned to suffer a violent death, have slept the night immediately preceding their execution, though there is perhaps no instance of a person accused of a capital crime having slept the first night of his confinement. Thus is the evil of life in some degree a remedy for itself, and though every man at twenty deprecates fourscore, almost every man is as tenacious of life at fourscore as at twenty; and if he does not suffer under any painful disorder, loses as little of the comforts that remain by reflecting that he is upon the brink of the grave, where the earth already crumbles under his feet, as he did of the pleasures of his better days, when his dissolution, though certain, was supposed to be at a distance.

Our travellers having slept, without once awaking, till the morning, examined the river, and finding the tide favoured their return, and the country promised nothing

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worthy of a farther search, they reimbarked in their boat, and made the best of their way to the ship.

Soon after the arrival of this party, the Master also returned, having been seven leagues out to sea, and he was now of opinion, that there was no getting out where before he thought there had been a passage; his expedition however was by no means without its advantage, for having been a second time upon the rock where he had seen the large cockles, he met with a great number of turtle, three of which he caught, that together weighed seven hundred and ninety-one pounds, though he had no better instrument than a boat hook.

Monday 9.

The next morning therefore, I sent him out again, with proper instruments for taking them, and Mr. Banks went with him, but the success did not at all answer our expectations, for, by the unaccountable conduct of the officer, not a single turtle was taken, nor could he be persuaded to return: Mr. Banks, however, went ashore upon the reef, where he saw several of the large cockles, and having collected many shells, and marine productions, he returned at eleven o'clock at night, in his own small boat, the Master still continuing with the large one upon the rock. In the afternoon, seven or eight of the natives had appeared on the south side of the river, and two of them came down to the sandy point, opposite to the ship; but upon seeing me put off in a boat to speak with them, they all ran away with the greatest precipitation.

Tuesday 10.

As the Master continued absent with the boat all night, I was forced to send the Second Lieutenant for him, early the next morning in the yawl; and soon after four of the natives appeared upon the sandy point, on the north side of the river, having with them a small wooden canoe, with outriggers:

riggers: they seemed for some time to be busily employed in striking fish: some of our people were for going over to them in a boat, but this I would by no means permit, repeated experience having convinced me that it was more likely to prevent, than procure an interview. I was determined to try what could be done by a contrary method, and accordingly let them alone, without appearing to take the least notice of them: this succeeded so well, that at length two of them came in the canoe within a musket shot of the ship, and there talked a great deal in a very loud tone: we understood nothing that they said, and therefore could answer their harangue only by shouting, and making all the signs of invitation and kindness that we could devise. During this conference, they came, insensibly, nearer and nearer, holding up their lances, not in a threatening manner, but as if to intimate that if we offered them any injury, they had weapons to revenge it. When they were almost along-side of us, we threw them some cloth, nails, beads, paper, and other trifles, which they received without the least appearance of satisfaction: at last, one of the people happened to throw them a small fish; at this they expressed the greatest joy imaginable, and intimating, by signs, that they would fetch their companions, immediately paddled away towards the shore. In the mean time some of our people, and among them Tupia, landed on the opposite side of the river: the canoe, with all the four Indians, very soon returned to the ship, and came quite along-side, without expressing any fear or distrust. We distributed some more presents among them, and soon after they left us, and landed on the same side of the river where our people had gone ashore: every man carried in his hand two lances, and a stick, which is used in throwing them, and advanced to

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the place where Tupia and the rest of our people were sitting; Tupia soon prevailed upon them to lay down their arms, and come forward without them: he then made signs that they should sit down by him, with which they complied, and seemed to be under no apprehension or constraint: several more of us then going ashore, they expressed some jealousy lest we should get between them and their arms; we took care however to shew them that we had no such intention, and having joined them, we made them some more presents, as a farther testimony of our good-will, and our desire to obtain theirs. We continued together, with the utmost cordiality, till dinner time, and then giving them to understand that we were going to eat, we invited them, by signs, to go with us: this however they declined, and as soon as we left them, they went away in their canoe. One of these men was somewhat above the middle age, the other three were young; they were in general of the common stature, but their limbs were remarkably small; their skin was of the colour of wood foot, or what would be called a dark chocolate colour; their hair was black, but not woolly; it was short cropped, in some lank, and in others curled. Dampier says, that the people whom he saw on the western coast of this country, wanted two of their fore-teeth, but these had no such defect: some part of their bodies had been painted red, and the upper lip and breast of one of them was painted with streaks of white, which he called *Carbanda*; their features were far from disagreeable, their eyes were lively, and their teeth even and white, their voices were soft and tuneable, and they repeated many words after us with great facility. In the night, Mr. Gore and the Master returned with the long-boat, and brought one turtle and a few shell-fish. The yawl had been left upon the shoal with six men, to make a farther trial for turtle.

The

The next morning, we had another visit from four of the natives; three of them had been with us before, but the fourth was a stranger, whose name, as we learnt from his companions who introduced him, was YAPARICO. This gentleman was distinguished by an ornament of a very striking appearance: it was the bone of a bird, nearly as thick as a man's finger, and five or six inches long, which he had thrust into a hole, made in the gristle that divides the nostrils; of this we had seen one instance, and only one, in New Zealand; but upon examination, we found that among all these people this part of the nose was perforated, to receive an ornament of the same kind: they had also holes in their ears, though nothing was then hanging to them, and had bracelets upon the upper part of their arms, made of plaited hair, so that, like the inhabitants of Terra del Fuego, they seem to be fond of ornament, though they are absolutely without apparel; and one of them, to whom I had given part of an old shirt, instead of throwing it over any part of his body, tied it as a fillet round his head. They brought with them a fish, which they gave us, as we supposed, in return for the fish that we had given them the day before. They seemed to be much pleased, and in no haste to leave us, but seeing some of our gentlemen examine their canoe with great curiosity and attention, they were alarmed, and jumping immediately into it, paddled away without speaking a word.

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Wednes. 11.

About two the next morning, the yawl, which had been left upon the shoal, returned, with three turtles and a large skate. As it seemed now probable that this fishery might be prosecuted with advantage, I sent her out again, after breakfast, for a further supply. Soon after, three Indians ventured down to Tupia's tent, and were so well pleased with their reception, that one of them went with the canoe to
fetch

Thursday 12.

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fetch two others whom we had never seen: when he returned, he introduced the strangers by name, a ceremony which, upon such occasions, was never omitted. As they had received the fish that was thrown into their canoe, when they first approached the ship, with so much pleasure, some fish was offered to them now, and we were greatly surprized to see that it was received with the greatest indifference: they made signs, however, to some of the people, that they should dress it for them, which was immediately done, but after eating a little of it, they threw the rest to Mr. Banks's dog. They staid with us all the forenoon, but would never venture above twenty yards from their canoe. We now perceived that the colour of their skin was not so dark as it appeared, what we had taken for their complexion, being the effects of dirt and smoke, in which, we imagined, they contrived to sleep, notwithstanding the heat of the climate, as the only means in their power to keep off the musquitos. Among other things that we had given them when we first saw them, were some medals, which we had hung round their necks by a riband; and these ribands were so changed by smoke, that we could not easily distinguish of what colour they had been: this incident led us more narrowly to examine the colour of their skin. While these people were with us, we saw two others on the point of land that lay on the opposite side of the river, at the distance of about two hundred yards, and by our glasses discovered them to be a woman and a boy; the woman, like the rest, being stark naked. We observed, that all of them were remarkably clean-limbed, and exceedingly active and nimble. One of these strangers had a necklace of shells, very prettily made, and a bracelet upon his arm, formed of several strings, so as to resemble what in England is called gymp: both of them had a piece of bark tied over the forehead, and were dis-
figured

figured by the bone in the nose. We thought their language more harsh than that of the Islanders in the South Sea, and they were continually repeating the word *chercau*, which we imagined to be a term expressing admiration, by the manner in which it was uttered: they also cried out, when they saw any thing new, *cher, tut, tut, tut, tut!* which probably had a similar signification. Their canoe was not above ten feet long, and very narrow, but it was fitted with an outrigger, much like those of the islands, though in every respect very much inferior: when it was in shallow water, they set it on with poles, and when in deep, they worked it with paddles about four feet long: it contained just four people, so that the people who visited us to-day went away at two turns. Their lances were like those that we had seen in Botany Bay, except that they had but a single point, which in some of them was the sting of the ray, and barbed with two or three sharp bones of the same fish: it was indeed a most terrible weapon, and the instrument which they used in throwing it, seemed to be formed with more art than any we had seen before. About twelve o'clock next day, the yawl returned, with another turtle, and a large sting-ray, and in the evening, was sent out again.

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Friday 13.

The next morning, two of the Indians came on board, but after a short stay, went along the shore, and applied themselves with great diligence to the striking of fish. Mr. Gore, who went out this day with his gun, had the good fortune to kill one of the animals which had been so much the subject of our speculation: an idea of it will best be conceived by the cut, plate XX, without which, the most accurate verbal description would answer very little purpose, as it has not similitude enough to any animal already known; to admit of illustration by reference. In form, it is most

Saturday 14.

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like the gerbua, which it also resembles in its motion, as has been observed already, but it greatly differs in size, the gerbua not being larger than a common rat, and this animal, when full grown, being as big as a sheep: this individual was a young one, much under its full growth, weighing only thirty-eight pounds. The head, neck, and shoulders, are very small in proportion to the other parts of the body; the tail is nearly as long as the body, thick near the rump, and tapering towards the end: the fore-legs of this individual were only eight inches long, and the hind-legs two and twenty: its progress is by successive leaps or hops, of a great length, in an erect posture; the fore-legs are kept bent close to the breast, and seemed to be of use only for digging: the skin is covered with a short fur, of a dark mouse or grey colour, excepting the head and ears, which bear a slight resemblance to those of a hare. This animal is called by the natives *Kanguroo*.

Sunday 15.

The next day, our Kanguroo was dressed for dinner, and proved most excellent meat; we might now indeed be said to fare sumptuously every day, for we had turtle in great plenty, and we all agreed that they were much better than any we had tasted in England, which we imputed to their being eaten fresh from the sea, before their natural fat had been wasted, or their juices changed by a diet and situation so different from what the sea affords them, as garbage and a tub. Most of those that we caught here, were of the kind called green turtle, and weighed from two to three hundred weight, and when these were killed, they were always found to be full of turtle grass, which our naturalists took to be a kind of *conserua*: two of them were loggerheads, the flesh of which was much less delicious, and in their stomachs nothing was to be found but shells.

In

In the morning of the 16th, while the people were employed as usual in getting the ship ready for the sea, I climbed one of the hills on the north side of the river, from which I had an extensive view of the inland country, and found it agreeably diversified by hills, vallies, and large plains, which in many places were richly covered with wood. This evening, we observed an emerfion of Jupiter's first fatellite, which gave $214^{\circ} 53' 45''$ of longitude. The obfervation which was made on the 29th of June gave $214^{\circ} 42' 30''$; the mean is $214^{\circ} 48' 7\frac{1}{2}''$, the longitude of this place west of Greenwich.

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Monday 16.

On the 17th, I fent the Mafter and one of the Mates in the pinnace to look for a channel to the northward; and I went myfelf with Mr. Banks and Dr. Solander into the woods on the other fide of the water. Tupia, who had been thither by himfelf, reported, that he had feen three Indians who had given him fome roots about as thick as a man's finger, in fhape not much unlike a rhadifh, and of a very agreeable tafte. This induced us to go over, hoping that we fhould be able to improve our acquaintance with the natives: in a very little time we difcovered four of them in a canoe, who as foon as they faw us came afhore, and, though they were all ftrangers, walked up to us, without any figns of fufpicion or fear. Two of thefe had necklaces of fhells, which we could not perfuade them to part with for any thing we could give them: we prefented them however with fome beads, and after a fhort ftay they departed. We attempted to follow them, hoping that they would conduct us to fome place where we fhould find more of them, and have an opportunity of feeing their women; but they made us underftand, by figns, that they did not defire our company.

Tuesday 17.

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Wednes. 18.

At eight o'clock the next morning, we were visited by several of the natives, who were now become quite familiar. One of them, at our desire, threw his lance, which was about eight feet long: it flew with a swiftness and steadiness that surprised us, and though it was never more than four feet from the ground, it entered deeply into a tree at fifty paces distance. After this they ventured on board, where I left them, to all appearance much entertained, and went again with Mr. Banks to take a view of the country; but chiefly to indulge an anxious curiosity, by looking round us upon the sea, of which our wishes almost persuaded us we had formed an idea more disadvantageous than the truth. After having walked about seven or eight miles along the shore to the northward, we ascended a very high hill, and were soon convinced that the danger of our situation was at least equal to our apprehensions; for in whatever direction we turned our eyes, we saw rocks and shoals without number, and no passage out to sea, but through the winding channels between them, which could not be navigated without the last degree of difficulty and danger. We returned therefore to the ship, not in better spirits than when we left it; we found several natives still on board, and we were told that the turtles, of which we had then no less than twelve upon the deck, had fixed their attention more than any thing else in the ship.

Thursday 19.

On the 19th in the morning, we were visited by ten of the natives, the greater part from the other side of the river, where we saw six or seven more, most of them women, and like all the rest of the people we had seen in this country, they were stark naked. Our guests brought with them a greater number of lances than they had ever done before, and having laid them up in a tree, they set a man and a boy to watch

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Thursday 19th

watch them: the rest then came on board, and we soon perceived that they had determined to get one of our turtle, which was probably as great a dainty to them as to us. They first asked us, by signs, to give them one; and being refused, they expressed, both by looks and gestures, great disappointment and anger. At this time we happened to have no victuals dressed, but I offered one of them some biscuit, which he snatched and threw overboard with great disdain. One of them renewed his request to Mr. Banks, and upon a refusal stamped with his foot, and pushed him from him in a transport of resentment and indignation: having applied by turns to almost every person who appeared to have any command in the ship, without success, they suddenly seized two of the turtles, and dragged them towards the side of the ship where their canoe lay: our people soon forced them out of their hands, and replaced them with the rest. They would not however relinquish their enterprise, but made several other attempts of the same kind, in all which being equally disappointed, they suddenly leaped into their canoe in a rage, and began to paddle towards the shore. At the same time, I went into the boat with Mr. Banks, and five or six of the ship's crew, and we got ashore before them, where many more of our people were already engaged in various employments; as soon as they landed, they seized their arms, and, before we were aware of their design, they snatched a brand from under a pitch kettle which was boiling, and making a circuit to the windward of the few things we had on shore, they set fire to the grass in their way, with surprising quickness and dexterity: the grass, which was five or six feet high, and as dry as stubble, burnt with amazing fury; and the fire made a rapid progress towards a tent of Mr. Banks's, which had been set up for Tupia when he was sick, taking in its course a sow and pigs,

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Thursday 19.

one of which it scorched to death. Mr. Banks leaped into a boat, and fetched some people from on board, just time enough to save his tent, by hauling it down upon the beach; but the smith's forge, at least such part of it as would burn, was consumed. While this was doing, the Indians went to a place at some distance, where several of our people were washing, and where our nets, among which was the seine, and a great quantity of linen, were laid out to dry; here they again set fire to the grass, entirely disregarding both threats and entreaties. We were therefore obliged to discharge a musquet, loaded with small shot, at one of them, which drew blood at the distance of about forty yards, and this putting them to flight, we extinguished the fire at this place before it had made much progress; but where the grass had been first kindled, it spread into the woods to a great distance. As the Indians were still in sight, I fired a musquet, charged with ball, abreast of them among the mangroves, to convince them that they were not yet out of our reach: upon hearing the ball they quickened their pace, and we soon lost sight of them. We thought they would now give us no more trouble; but soon after we heard their voices in the woods, and perceived that they came nearer and nearer. I set out, therefore, with Mr. Banks and three or four more, to meet them: when our parties came in sight of each other, they halted; except one old man, who came forward to meet us: at length he stopped, and having uttered some words, which we were very sorry we could not understand, he went back to his companions, and the whole body slowly retreated. We found means however to seize some of their darts, and continued to follow them about a mile: we then sat down upon some rocks, from which we could observe their motions, and they also sat down at about an hundred yards distance. After a short time, the old

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Thursday 19.

man again advanced towards us, carrying in his hand a lance without a point: he stopped several times, at different distances, and spoke; we answered by beckoning and making such signs of amity as we could devise; upon which the messenger of peace, as we supposed him to be, turned and spoke aloud to his companions, who then set up their lances against a tree, and advanced towards us in a friendly manner: when they came up, we returned the darts or lances that we had taken from them, and we perceived with great satisfaction that this rendered the reconciliation complete. We found in this party four persons whom we had never seen before, who as usual were introduced to us by name; but the man who had been wounded in the attempt to burn our nets and linen, was not among them; we knew however that he could not be dangerously hurt, by the distance at which the shot reached him. We made all of them presents of such trinkets as we had about us, and they walked back with us towards the ship: as we went along, they told us, by signs, that they would not set fire to the grass any more; and we distributed among them some musquet balls, and endeavoured to make them understand their use and effect. When they came abreast of the ship, they sat down, but could not be prevailed upon to come on board; we therefore left them, and in about two hours they went away, soon after which we perceived the woods on fire at about two miles distance. If this accident had happened a very little while sooner, the consequence might have been dreadful; for our powder had been aboard but a few days, and the store tent, with many valuable things which it contained, had not been removed many hours. We had no idea of the fury with which grass would burn in this hot climate, nor consequently of the difficulty of extinguishing it; but we determined, that if it should ever again be necessary for us

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Thursday 19.

us to pitch our tents in such a situation, our first measure should be to clear the ground round us.

In the afternoon we got every thing on board the ship, new birthed her, and let her swing with the tide; and at night the Master returned, with the discouraging account that there was no passage for the ship to the northward.

Friday 20.

The next morning, at low water, I went and founded and buoyed the bar, the ship being now ready for the sea. We saw no Indians this day, but all the hills round us for many miles were on fire, which at night made a most striking and beautiful appearance.

Saturday 21.

The 21st passed without our getting sight of any of the inhabitants, and indeed without a single incident worth notice.

Sunday 22.

On the 22d, we killed a turtle for the day's provision, upon opening which we found a wooden harpoon or turtle-peg, about as thick as a man's finger, near fifteen inches long, and bearded at the end, such as we had seen among the natives, sticking through both shoulders: it appeared to have been struck a considerable time, for the wound had perfectly healed up over the weapon.

Monday 23.

Early in the morning of the 23d, I sent some people into the country to gather a supply of the greens which have been before mentioned by the name of Indian Kale; and one of them having straggled from the rest, suddenly fell in with four Indians, three men and a boy, whom he did not see till, by turning short in the wood, he found himself among them. They had kindled a fire, and were broiling a bird of some kind, and part of a Kangaroo, the remainder of which, and a cockatoo, hung at a little distance upon a tree: the man, being unarmed, was at first greatly terrified; but he had the presence of mind not to run away, judging very
rightly,

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Monday 23.

rightly, that he was most likely to incur danger by appearing to apprehend it; on the contrary, he went and sat down by them, and, with an air of cheerfulness and good humour, offered them his knife, the only thing he had about him which he thought would be acceptable to them; they received it, and having handed it from one to the other, they gave it him again: he then made an offer to leave them; but this they seemed not disposed to permit: still however he dissembled his fears, and sat down again; they considered him with great attention and curiosity, particularly his clothes, and then felt his hands and face, and satisfied themselves that his body was of the same texture with their own. They treated him with the greatest civility, and having kept him about half an hour, they made signs that he might depart: he did not wait for a second dismissal, but when he left them, not taking the direct way to the ship, they came from their fire and directed him; so that they well knew whence he came.

In the mean time, Mr. Banks, having made an excursion on the other side of the river to gather plants, found the greatest part of the cloth that had been given to the Indians lying in a heap together, probably as useless lumber, not worth carrying away; and perhaps, if he had sought further, he might have found the other trinkets; for they seemed to set very little value upon any thing we had, except our turtle, which was a commodity that we were least able to spare.

The blowing weather, which prevented our attempt to get out to sea, still continuing, Mr. Banks and Dr. Solander went again out on the 24th to see whether any new plant could be picked up: they traversed the woods all day without success; but as they were returning through a deep valley,

Tuesday 24.

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Tuesday 24.

ley, the sides of which, though almost as perpendicular as a wall, were covered with trees and bushes; they found lying upon the ground several marking nuts, the *Anacardium orientale*; these put them upon a new scent, and they made a most diligent search after the tree that bore them, which perhaps no European botanist ever saw; but to their great mortification they could not find it: so that, after spending much time, and cutting down four or five trees, they returned quite exhausted with fatigue to the ship.

Wednes. 25.

On the 25th, having made an excursion up the river, I found a canoe belonging to our friends the Indians, whom we had not seen since the affair of the turtle; they had left it tied to some mangroves, about a mile distant from the ship, and I could see by their fires that they were retired at least six miles directly inland.

Thursday 26.

As Mr. Banks was again gleaning the country for his Natural History on the 26th, he had the good fortune to take an animal of the *Opoffum* tribe: it was a female, and with it he took two young ones: it was found much to resemble the remarkable animal of the kind, which Monf. de Buffon has described in his Natural History by the name of *Phalanger*, but it was not the same: Monf. Buffon supposes this tribe to be peculiar to America, but in this he is certainly mistaken; and probably, as Pallas has observed in his Zoology, the *Phalanger* itself is a native of the East Indies, as the animal which was caught by Mr. Banks resembled it in the extraordinary conformation of the feet, in which it differs from animals of every other tribe.

Friday 27.

On the 27th, Mr. Gore shot a Kangaroo, which, with the skin, entrails, and head, weighed eighty-four pounds. Upon examination, however, we found that this animal was not at its full growth, the innermost grinders not being yet formed:

We dressed it for dinner the next day; but to our great disappointment, we found it had a much worse flavour than that we had eaten before.

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Saturday 28.

The wind continued in the same quarter, and with the same violence, till five o'clock in the morning of the 29th, when it fell calm; soon after a light breeze sprung up from the land, and it being about two hours ebb, I sent a boat to see what water was upon the bar; in the mean time we got the anchor up, and made all ready to put to sea. But when the boat came back, the officer reported that there was only thirteen feet water upon the bar, which was six inches less than the ship drew. We were therefore obliged to come to, and the sea breeze setting in again about eight o'clock, we gave up all hope of sailing that day.

Sunday 29.

We had fresh gales at S. E. with hazy weather and rain, till two in the morning of the 31st, when the weather being something more moderate, I had thoughts of trying to warp the ship out of the harbour; but upon going out myself first in the boat, I found it still blow too fresh for the attempt. During all this time the pinnace and yawl continued to ply the net and hook with tolerable success; sometimes taking a turtle, and frequently bringing in from two to three hundred weight of fish.

Monday 30.
Tuesday 31.

On the 1st of August, the carpenter examined the pumps, and, to our great mortification, found them all in a state of decay, owing, as he said, to the sap's having been left in the wood; one of them was so rotten as, when hoisted up, to drop to pieces, and the rest were little better; so that our chief trust was now in the soundness of our vessel, which happily did not admit more than one inch of water in an hour.

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Wednesday 1.

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Friday 3.

Saturday 4.

At six o'clock in the morning of Friday the 3d, we made another unsuccessful attempt to warp the ship out of the harbour; but at five o'clock in the morning of the 4th, our efforts had a better effect, and about seven, we got once more under sail, with a light air from the land, which soon died away, and was followed by the sea-breezes from S. E. by S. with which we stood off to sea E. by N. having the pinnace ahead, which was ordered to keep sounding continually. The yawl had been sent to the turtle bank, to take up the net which had been left there; but as the wind freshened, we got out before her. A little before noon we anchored in fifteen fathom water, with a sandy bottom; for I did not think it safe to run in among the shoals, till I had well viewed them, at low-water, from the mast-head, which might determine me which way to steer: for as yet I was in doubt whether I should beat back to the southward, round all the shoals, or seek a passage to the eastward or the northward, all which at present appeared to be equally difficult and dangerous. When we were at anchor the harbour from which we sailed bore S. 70 W. distant about five leagues; the northermost point of the main in sight, which I named CAPE BEDFORD, and which lies in latitude $15^{\circ} 16' S.$, longitude $214^{\circ} 45' W.$ bore N. 20 W. distant three leagues and a half; but to the N. E. of this Cape we could see land which had the appearance of two high islands: the turtle banks bore east, distant one mile: our latitude by observation was $15^{\circ} 32' S.$ and our depth of water in standing off from the land was from three and an half to fifteen fathom.



CHART of Part of the COAST
OF
NEW SOUTH WALES,
FROM
CAPE TRIBULATION to ENDEAVOUR STRAITS.

By LIEUT. J. COOK,
1770.

EXPLANATION.
* Rocks, some of which are dry at Low-water
and others always covered.
— Supposed direction of such part of the Coast
and Shoals as were not seen.
⌘ Places where the Ship anchored
The Figures denote the depth of Water in Fathoms.

On this Ledge the Ship
laid 23 Hours, and re-
ceived much damage.

Scale of Leagues.

J. Chivers Sculp.

C H A P. VII.

Departure from Endeavour River; a particular Description of the Harbour there, in which the Ship was refitted, the adjacent Country, and several Islands near the Coast: the Range from Endeavour River to the Northern Extremity of the Country, and the Dangers of that Navigation.

TO the harbour which we had now left, I gave the name of ENDEAVOUR RIVER. It is only a small bar harbour, or creek, which runs in a winding channel three or four leagues inland, and at the head of which there is a small brook of fresh water: there is not depth of water for shipping above a mile within the bar, and at this distance only on the north side, where the bank is so steep for near a quarter of a mile, that a ship may lie afloat at low water, so near the shore as to reach it with a stage, and the situation is extremely convenient for heaving down; but at low water, the depth upon the bar is not more than nine or ten feet, nor more than seventeen or eighteen at the height of the tide; the difference between high and low water, at spring tides, being about nine feet. At the new and full of the moon it is high water between nine and ten o'clock: it must also be remembered, that this part of the coast is so barricaded with shoals, as to make the harbour still more difficult of access; the safest approach is from the southward, keeping the main land close upon the board all the way. Its situation may always be found by the latitude, which has been very accurately

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Saturday 4.

rately laid down. Over the south point is some high land, but the north point is formed by a low sandy beach, which extends about three miles to the northward, where the land begins again to be high.

The chief refreshment that we procured here, was turtle, but as they were not to be had without going five leagues out to sea, and the weather was frequently tempestuous, we did not abound with this dainty: what we caught, as well as the fish, was always equally divided among us all by weight, the meanest person on board having the same share as myself; and I think every commander, in such a voyage as this, will find it his interest to follow the same rule. In several parts of the sandy beaches, and sand hills near the sea, we found purslain, and a kind of bean that grows upon a stalk, which creeps along the ground: the purslain we found very good when it was boiled, and the beans are not to be despised, for we found them of great service to our sick: the best greens, however, that could be procured here, were the tops of the cocos, which have been mentioned already, as known in the West Indies by the name of *Indian kale*: these were, in our opinion, not much inferior to spinnage, which in taste they somewhat resemble; the roots indeed are not good, but they might probably be meliorated by proper cultivation. They are found here chiefly in boggy ground. The few cabbage palms that we met with, were in general small, and yielded so little cabbage that they were not worth seeking.

Besides the kangaroo, and the opossum that have been already mentioned, and a kind of polecat, there are wolves upon this part of the coast, if we were not deceived by the tracks upon the ground, and several species of serpents; some of the serpents are venomous, and some harmless:
there

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there are no tame animals here except dogs, and of these we saw but two or three, which frequently came about the tents, to pick up the scraps and bones that happened to lie scattered near them. There does not indeed seem to be many of any animal, except the kangaroo; we scarcely saw any other above once; but this we met with almost every time we went into the woods. Of land fowls we saw crows, kites, hawks, cockatoos of two sorts, one white and the other black, a very beautiful kind of loriquets, some parrots, pigeons of two or three sorts, and several small birds not known in Europe. The water fowls are herons, whistling ducks, which perch, and, I believe, roost upon trees, wild geese, curlews, and a few others, but these do not abound. The face of the country, which has been occasionally mentioned before, is agreeably diversified by hill and valley, lawn and wood. The soil of the hills is hard, dry, and stony, yet it produces coarse grass besides wood: the soil of the plains and vallies is in some places sand, and in some clay; in some also it is rocky and stony, like the hills; in general, however, it is well clothed, and has at least the appearance of fertility. The whole country, both hill and valley, wood and plain, abounds with ant hills, some of which are six or eight feet high, and twice as much in circumference. The trees here are not of many sorts; the gum tree, which we found on the southern part of the coast, is the most common, but here it is not so large: on each side of the river, through its whole course, there are mangroves in great numbers, which in some places extend a mile within the coast. The country is in all parts well watered, there being several fine rivulets at a small distance from each other, but none in the place where we lay, at least not during the time we were there, which was the dry season; we were however well supplied with water by springs, which were not far off.

In

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Saturday 4.

In the afternoon of the 4th, we had a gentle breeze at S. E. and clear weather, but as I did not intend to sail till the morning, I sent all the boats to the reef, to get what turtle and shell fish they could. At low water, I went up to the mast-head, and took a view of the shoals, which made a very threatening appearance: I could see several at a remote distance, and part of many of them was above water. The sea appeared most open to the north east of the turtle reef, and I came to a resolution to stretch out that way close upon a wind, because if we should find no passage, we could always return the way we went. In the evening, the boats brought in a turtle, a sting-ray, and as many large cockles as came to about a pound and a half a man, for in each of them there was not less than two pounds of meat: in the night also we caught several sharks, which, though not a dainty, were an acceptable increase of our fresh provision.

Sunday 5.

In the morning, I waited till half ebb before I weighed, because at that time the shoals begin to appear, but the wind then blew so hard that I was obliged to remain at anchor: in the afternoon, however, the gale becoming more moderate, we got under sail, and stood out upon a wind N. E. by E. leaving the turtle reef to windward, and having the pinnacle founding ahead: we had not kept this course long, before we discovered shoals before us, and upon both the bows; and at half an hour after four, having run about eight miles, the pinnacle made the signal for shoal water, where we little expected it: upon this we tacked, and stood on and off, while the pinnacle stretched farther to the eastward, and night approaching, I came to an anchor in twenty fathom water, with a muddy bottom. Endeavour River then bore S. 52 W. Cape Bedford W. by N. $\frac{1}{2}$ N. distant five leagues, the northermost land in sight, which had the appearance of an island, N.; and a shoal, a small sandy part of
of

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Sunday 5.

Monday 6.

of which appeared above water, bore N. E. distant between two and three miles: in standing off from turtle reef to this place, we had from fourteen to twenty fathom water, but when the pinnacle was about a mile farther to the E. N. E. there was no more than four or five feet water, with rocky ground; and yet this did not appear to us in the ship. In the morning of the 6th, we had a strong gale, so that instead of weighing, we were obliged to veer away more cable, and strike our top-gallant yards. At low water, myself, with several of the officers, kept a look-out at the mast-head, to see if any passage could be discovered between the shoals, but nothing was in view except breakers, extending from the S. round by the E. as far as N. W. and out to sea beyond the reach of our sight; these breakers, however, did not appear to be caused by one continued shoal, but by several, which lay detached from each other: on that which lay farthest to the eastward, the sea broke very high, which made me think it was the outermost, for upon many of these within, the breakers were inconsiderable, and from about half ebb to half flood, they were not to be seen at all, which makes sailing among them still more dangerous, especially as the shoals here consist principally of coral rocks, which are as steep as a wall; upon some of them however, and generally at the north end, there are patches of sand, which are covered only at high water, and which are to be discerned at some distance. Being now convinced that there was no passage to sea, but through the labyrinth formed by these shoals, I was altogether at a loss which way to steer, when the weather should permit us to get under sail. It was the Master's opinion, that we should beat back the way we came, but this would have been an endless labour, as the wind blew strongly from that quarter, almost without intermission; on the other hand, if no passage could be found to

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Tuesday 7.

Wednes. 8.
Thursday 9.
Friday 10.

the northward, we should be compelled to take that measure at last. These anxious deliberations engaged us till eleven o'clock at night, when the ship drove, and obliged us to veer away to a cable and one third, which brought her up; but in the morning, the gale increasing, she drove again, and we therefore let go the small bower, and veered away to a whole cable upon it, and two cables on the other anchors, yet she still drove, though not so fast; we then got down top-gallant masts, and struck the yards and top-masts close down, and at last had the satisfaction to find that she rode. Cape Bedford now bore W. S. W. distant three leagues and an half, and in this situation we had shoals to the eastward, extending from the S. E. by S. to the N. N. W. the nearest of which was about two miles distant. As the gale continued, with little remission, we rode till seven o'clock in the morning of the 10th, when, it being more moderate, we weighed, and stood in for the land, having at length determined to seek a passage along the shore to the northward, still keeping the boat ahead: during our run in we had from nineteen to twelve fathom: after standing in about an hour, we edged away for three small islands that lay N. N. E. $\frac{1}{2}$ E. three leagues from Cape Bedford, which the Master had visited while we were in port. At nine o'clock, we were abreast of them, and between them and the main: between us and the main there was another low island, which lies N. N. W. four miles from the three islands; and in this channel we had fourteen fathom water. The northermost point of land in sight now bore N. N. W. $\frac{1}{4}$ W. distant about two leagues. Four or five leagues to the north of this head land, we saw three islands, near which lay some that were still smaller, and we could see the shoals and reefs without us, extending to the northward, as far as these islands: between these reefs and the head land, we directed our course, leaving

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Friday 10.

leaving to the eastward a small island, which lies N. by E. distant four miles from the three islands. At noon, we were got between the head land and the three islands: from the head land we were distant two leagues, and from the islands four; our latitude, by observation, was $14^{\circ} 51'$. We now thought we saw a clear opening before us, and hoped that we were once more out of danger; in this hope, however, we soon found ourselves disappointed, and for that reason I called the head land CAPE FLATTERY. It lies in latitude $14^{\circ} 56'S$. longitude $214^{\circ} 43'W$. and is a lofty promontory, making next the sea in two hills, which have a third behind them, with low sandy ground on each side: it may however be still better known by the three islands out at sea: the northermost and largest lies about five leagues from the Cape, in the direction of N. N. E. From Cape Flattery the land trends away N. W. and N. W. by W. We steered along the shore N. W. by W. till one o'clock, for what we thought the open channel, when the petty officer at the mast-head cried out that he saw land ahead, extending quite round to the islands that lay without us, and a large reef between us and them: upon this I ran up to the mast-head myself, from whence I very plainly saw the reef, which was now so far to windward, that we could not weather it, but the land ahead, which he had supposed to be the main, appeared to me to be only a cluster of small islands. As soon as I got down from the mast-head, the Master, and some others went up, who all insisted that the land ahead was not islands, but the main, and to make their report still more alarming, they said that they saw breakers all round us. In this dilemma, we hauled upon a wind in for the land, and made the signal for the boat that was founding ahead to come on board, but as she was far to leeward, we were obliged to edge away to take her up, and soon after we came to an anchor, under a

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Friday 10.

point of the main, in somewhat less than five fathom, and at about the distance of a mile from the shore. Cape Flattery now bore S. E. distant three leagues and an half. As soon as the ship was at anchor, I went ashore upon the point, which is high, and afforded me a good view of the sea coast, trending away N. W. by W. eight or ten leagues, which, the weather not being very clear, was as far as I could see. Nine or ten small low islands, and some shoals, appeared off the coast; I saw also some large shoals between the main and the three high islands, without which, I was clearly of opinion there were more islands, and not any part of the main. Except the point I was now upon, which I called POINT LOOK-OUT, and Cape Flattery, the main land, to the northward of Cape Bedford, is low, and chequered with white sand and green bushes, for ten or twelve miles inland, beyond which it rises to a considerable height. To the northward of Point Look-out, the coast appeared to be shoal and flat, for a considerable distance, which did not encourage the hope that the channel we had hitherto found in with the land would continue. Upon this point, which was narrow, and consisted of the finest white sand we had ever seen, we discovered the footsteps of people, and we saw also smoke and fire at a distance up the country.

In the evening, I returned to the ship, and resolved the next morning to visit one of the high islands in the offing, from the top of which, as they lay five leagues out to sea, I hoped to discover more distinctly the situation of the shoals, and the channel between them.

Saturday 11.

In the morning therefore, of the 11th, I set out in the pinnace, accompanied by Mr. Banks, whose fortitude and curiosity made him a party in every expedition, for the northernmost and largest of the three islands, and at the same time I
sent

sent the Master in the yawl to leeward, to sound between the low islands and the main. In my way, I passed over a reef of coral rock and sand, which lies about two leagues from the island, and I left another to leeward, which lies about three miles from it: on the north part of the reef, to the leeward, there is a low sandy island, with trees upon it; and upon the reef which we passed over, we saw several turtle: we chased one or two, but having little time to spare, and the wind blowing fresh, we did not take any.

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About one o'clock, we reached the island, and immediately ascended the highest hill, with a mixture of hope and fear, proportioned to the importance of our business, and the uncertainty of the event: when I looked round, I discovered a reef of rocks, lying between two and three leagues without the islands, and extending in a line N. W. and S. E. farther than I could see, upon which the sea broke in a dreadful surf; this however made me think that there were no shoals beyond them, and I conceived hopes of getting without these, as I perceived several breaks or openings in the reef, and deep water between that and the islands. I continued upon this hill till sunset, but the weather was so hazy during the whole time that I came down much disappointed. After reflecting upon what I had seen, and comparing the intelligence I had gained with what I expected, I determined to stay upon the island all night, hoping that the morning might be clearer, and afford me a more distinct and comprehensive view. We therefore took up our lodging under the shelter of a bush which grew upon the beach, and at three in the morning, having sent the pinnace with one of the Mates whom I had brought out with me, to sound between the island and the reefs, and examine what appeared to be a channel through them, I climbed the hill a second time; but to my great disappointment found the weather much more

Sunday 12.

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hazy than it had been the day before. About noon the pin-
nace returned, having been as far as the reef, and found
between fifteen and twenty-eight fathom of water; but it
blew so hard that the Mate did not dare to venture into one
of the channels, which he said appeared to him to be very
narrow: this however did not discourage me, for I judged
from his description of the place he had been at, that he had
seen it to disadvantage. While I was busy in my survey, Mr.
Banks was attentive to his favourite pursuit, and picked up
several plants which he had not before seen. We found the
island, which is visible at twelve leagues distance, to be about
eight leagues in circumference, and in general very rocky
and barren. On the north west side, however, there are
some sandy bays, and some low land, which is covered with
long thin grass, and trees of the same kind with those upon
the main: this part also abounded with lizards of a very
large size, some of which we took. We found also fresh
water in two places; one was a running stream, but that
was a little brackish where I tasted it, which was close to the
sea; the other was a standing pool, close behind the sandy
beach, and this was perfectly sweet and good. Notwith-
standing the distance of this island from the main, we saw,
to our great surprize, that it was sometimes visited by the
natives; for we found seven or eight frames of their huts,
and vast heaps of shells, the fish of which we supposed had
been their food. We observed that all these huts were built
upon eminences, and entirely exposed to the S. E. contrary
to those which we had seen upon the main; for they were
all built either upon the side of a hill, or under some bushes
which afforded them shelter from the wind. From these
huts, and their situation, we concluded that at some seasons
of the year the weather here is invariably calm and fine; for
the inhabitants have no boat which can navigate the sea to
so

so great a distance, in such weather as we had from the time of our first coming upon the coast. As we saw no animals upon this place but lizards, I called it LIZARD ISLAND; the other two high islands, which lie at the distance of four or five miles from it, are comparatively small; and near them lie three others smaller still, and low, with several shoals or reefs, especially to the S. E.: there is however a clear passage from Cape Flattery to these islands, and even quite to the outward reefs, leaving Lizard Island to the north west, and the others to the south east.

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At two in the afternoon, there being no hope of clear weather, we set out from Lizard Island to return to the ship, and in our way landed upon the low sandy island with trees upon it, which we had remarked in our going out. Upon this island we saw an incredible number of birds, chiefly sea-fowl: we found also the nest of an eagle with young ones, which we killed; and the nest of some other bird, we knew not what, of a most enormous size; it was built with sticks upon the ground, and was no less than six and twenty feet in circumference, and two feet eight inches high. We found also that this place had been visited by the Indians, probably to eat turtle, many of which we saw upon the island, and a great number of their shells, piled one upon another in different places.

To this spot we gave the name of EAGLE ISLAND, and after leaving it, we steered S.W. directly for the ship, sounding all the way, and we had never less than eight fathom, nor more than fourteen; the same depth of water that I had found between this and Lizard Island.

When I got on board, the Master informed me that he had been down to the low islands, between which and the main I had directed him to sound; that he judged them to lie
about

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about three leagues from the main; that without them he found from ten to fourteen fathom, and between them and the main seven: but that a flat, which ran two leagues out from the main, made this channel narrow. Upon one of these low islands he slept, and was ashore upon others; and he reported, that he saw every where piles of turtle-shells, and fins hanging upon the trees in many places, with the flesh upon them, so recent, that the boat's crew eat of them: he saw also two spots, clear of grass, which appeared to have been lately dug up, and from the shape and size of them he conjectured they were graves.

After considering what I had seen myself, and the report of the Master, I was of opinion that the passage to leeward would be dangerous, and that, by keeping in with the main, we should run the risk of being locked in by the great reef, and at last be compelled to return back in search of another passage, by which, or any other accident that should cause the same delay, we should infallibly lose our passage to the East Indies, and endanger the ruin of the voyage, as we had now but little more than three months provisions on board at short allowance.

Having stated this opinion, and the facts and appearances upon which it was founded, to the officers, it was unanimously agreed, that the best thing we could do would be to quit the coast altogether, till we could approach it with less danger.

Monday 13.

In the morning therefore, at break of day, we got under sail, and stood out N. E. for the north west end of Lizard Island, leaving Eagle Island to windward, and some other islands and shoals to the leeward, and having the pinnace ahead to ascertain the depth of water in every part of our course. In this channel we had from nine to fourteen fathoms.

thom. At noon, the north west end of Lizard Island bore E. S. E. distant one mile; our latitude by observation was $14^{\circ} 38'$, and our depth of water fourteen fathom. We had a steady gale at S. E. and by two o'clock we just fetched to windward of one of the channels or openings in the outer reef, which I had seen from the island. We now tacked, and made a short trip to the S. W. while the Master in the pinnace examined the channel: he soon made the signal for the ship to follow, and in a short time she got safe out. As soon as we had got without the breakers, we had no ground with one hundred and fifty fathom, and found a large sea rolling in from the S. E. a certain sign that neither land nor shoals were near us in that direction.

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Our change of situation was now visible in every countenance, for it was most sensibly felt in every breast: we had been little less than three months entangled among shoals and rocks, that every moment threatened us with destruction; frequently passing our nights at anchor within hearing of the surge that broke over them; sometimes driving towards them even while our anchors were out, and knowing that if by any accident, to which an almost continual tempest exposed us, they should not hold, we must in a few minutes inevitably perish. But now, after having failed no less than three hundred and sixty leagues, without once having a man out of the chains heaving the lead, even for a minute, which perhaps never happened to any other vessel, we found ourselves in an open sea, with deep water; and enjoyed a flow of spirits which was equally owing to our late dangers and our present security: yet the very waves, which by their swell convinced us that we had no rocks or shoals to fear, convinced us also that we could not safely put the same confidence in our vessel as before she had struck; for the blows

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she received from them so widened her leaks, that she admitted no less than nine inches water in an hour, which, considering the state of our pumps, and the navigation that was still before us, would have been a subject of more serious consideration, to people whose danger had not so lately been so much more imminent.

The passage or channel, through which we passed into the open sea beyond the reef, lies in latitude $14^{\circ} 32'$ S. and may always be known by the three high islands within it, which I have called the ISLANDS OF DIRECTION, because by these a stranger may find a safe passage through the reef quite to the main. The channel lies from Lizard Island N. E. $\frac{1}{2}$ N. distant three leagues, and is about one third of a mile broad, and not more in length. Lizard Island which is, as I have before observed, the largest and the northermost of the three, affords safe anchorage under the north west side, fresh water, and wood for fuel. The low islands and shoals also which lie between it and the main abound with turtle and fish, which may probably be caught in all seasons of the year, except when the weather is very tempestuous; so that, all things considered, there is not perhaps a better place for ships to refresh at upon the whole coast than this island. And before I dismiss it, I must observe, that we found upon it, as well as upon the beach in and about Endeavour River, bamboos, cocoa nuts, pumice stone, and the seeds of plants which are not the produce of this country, and which it is reasonable to suppose are brought from the eastward by the trade winds. The islands which were discovered by Quiros, and called Australia del Espiritu Santa, lie in this parallel; but how far to the eastward cannot now be ascertained: in most charts they are placed in the same longitude with this country, which, as appears by the account of his voyage
that

that has been published, he never saw; for that places his discoveries no less than two and twenty degrees to the eastward of it.

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As soon as we were without the reef, we brought to, and having hoisted in the boats, we stood off and on upon a wind all night; for I was not willing to run to leeward till I had a whole day before me. In the morning, at day-break, Lizard Island bore S. 15 E. distant ten leagues; and we then made sail and stood away N.N.W. $\frac{1}{2}$ W. till nine o'clock, when we stood N.W. $\frac{1}{2}$ N. having the advantage of a fresh gale at S.E. At noon, our latitude by observation was $13^{\circ} 46'$ S. and at this time we had no land in sight. At six in the evening we shortened sail and brought the ship to, with her head to the N.E.; and at six in the morning made sail and steered west, in order to get within sight of the land, that I might be sure not to overshoot the passage, if a passage there was, between this land and New Guinea. At noon, our latitude by observation was $13^{\circ} 2'$ S., longitude 216° W.; which was $1^{\circ} 23'$ W. of Lizard Island: at this time we had no land in sight; but a little before one o'clock, we saw high land from the mast-head, bearing W.S.W. At two, we saw more land to the N.W. of that we had seen before: it appeared in hills, like islands; but we judged it to be a continuation of the main land. About three, we discovered breakers between the land and the ship, extending to the southward farther than we could see; but to the north we thought we saw them terminate abreast of us. What we took for the end of them in this direction, however, soon appeared to be only an opening in the reef; for we presently saw them again, extending northward beyond the reach of our sight. Upon this we hauled close upon a wind, which was now at E.S.E. and we had scarcely trimmed our sails before it came to E. by N. which was right upon the reef, and consequently made our clear-

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ing it doubtful. At sunset the northermost part of it that was in sight bore from us N. by E. and was two or three leagues distant; this however being the best tack to clear it, we kept standing to the northward with all the sail we could set till midnight; when, being afraid of standing too far in this direction, we tacked and stood to the southward, our run from sunset to this time being six leagues N. and N. by E. When we had stood about two miles S. S. E. it fell calm; we had foundered several times during the night, but had no bottom with one hundred and forty fathom, neither had we any ground now with the same length of line; yet, about four in the morning, we plainly heard the roaring of the surf, and at break of day saw it foaming to a vast height, at not more than a mile's distance. Our distress now returned upon us with double force; the waves which rolled in upon the reef, carried us towards it very fast; we could reach no ground with an anchor, and had not a breath of wind for the sail. In this dreadful situation, no resource was left us but the boats; and to aggravate our misfortune the pinnacle was under repair: the longboat and yawl however were put into the water, and sent ahead to tow, which, by the help of our sweeps abaft, got the ship's head round to the northward; which, if it could not prevent our destruction, might at least delay it. But it was six o'clock before this was effected, and we were not then a hundred yards from the rock upon which the same billow which washed the side of the ship, broke to a tremendous height the very next time it rose; so that between us and destruction there was only a dreary valley, no wider than the base of one wave, and even now the sea under us was unfathomable, at least no bottom was to be found with a hundred and twenty fathom. During this scene of distress the carpenter had found means to patch up the pinnacle; so that she was

hoisted out, and sent ahead, in aid of the other boats, to tow; but all our efforts would have been ineffectual, if, just at this crisis of our fate, a light air of wind had not sprung up, so light, that at any other time we should not have observed it, but which was enough to turn the scale in our favour, and, in conjunction with the assistance which was afforded us by the boats, to give the ship a perceptible motion obliquely from the reef. Our hopes now revived; but in less than ten minutes it was again a dead calm, and the ship was again driven towards the breakers, which were now two hundred yards distant. The same light breeze however returned before we had lost all the ground it had enabled us to gain, and lasted about ten minutes more. During this time we discovered a small opening in the reef, at about the distance of a quarter of a mile: I immediately sent one of the Mates to examine it, who reported that its breadth was not more than the length of the ship, but that within it there was smooth water: this discovery seemed to render our escape possible, and that was all, by pushing the ship through the opening, which was immediately attempted. It was uncertain indeed whether we could reach it; but if we should succeed thus far, we made no doubt of being able to get through: in this however we were disappointed, for having reached it by the joint assistance of our boats and the breeze, we found that in the mean time it had become high water, and to our great surprize we met the tide of ebb rushing out of it like a mill-stream. We gained however some advantage, though in a manner directly contrary to our expectations; we found it impossible to go through the opening, but the stream that prevented us, carried us out about a quarter of a mile: it was too narrow for us to keep in it longer; yet this tide of ebb so much assisted the boats that by noon we had got an offing of near two miles.

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miles. We had, however, reason to despair of deliverance, even if the breeze, which had now died away, should revive, for we were still embayed in the reef; and the tide of ebb being spent, the tide of flood, notwithstanding our utmost efforts, again drove the ship into the bight. About this time, however, we saw another opening, near a mile to the westward, which I immediately sent the First Lieutenant, Mr. Hicks, in the small boat to examine: in the mean time we struggled hard with the flood, sometimes gaining a little, and sometimes losing; but every man still did his duty, with as much calmness and regularity as if no danger had been near. About two o'clock, Mr. Hicks returned with an account that the opening was narrow and dangerous, but that it might be passed: the possibility of passing it was sufficient encouragement to make the attempt, for all danger was less imminent than that of our present situation. A light breeze now sprung up at E. N. E. with which, by the help of our boats, and the very tide of flood that without an opening would have been our destruction, we entered it, and were hurried through with amazing rapidity, by a torrent that kept us from driving against either side of the channel, which was not more than a quarter of a mile in breadth. While we were shooting this gulph, our soundings were from thirty to seven fathom, very irregular, and the ground at bottom very foul.

As soon as we had got within the reef we anchored in nineteen fathom, over a bottom of coral and shells. And now, such is the vicissitude of life, we thought ourselves happy in having regained a situation, which but two days before it was the utmost object of our hope to quit. Rocks and shoals are always dangerous to the mariner, even where their situation has been ascertained; they are more dangerous in seas which have never before been navigated, and in
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this part of the globe they are more dangerous than in any other; for here they are reefs of coral rock, rising like a wall almost perpendicularly out of the unfathomable deep, always overflowed at high-water, and at low-water dry in many places; and here the enormous waves of the vast Southern Ocean, meeting with so abrupt a resistance, break, with inconceivable violence, in a surf which no rocks or storms in the northern hemisphere can produce. The danger of navigating unknown parts of this ocean was now greatly increased by our having a crazy ship, and being short of provisions and every other necessary; yet the distinction of a first discoverer made us cheerfully encounter every danger, and submit to every inconvenience; and we chose rather to incur the censure of imprudence and temerity, which the idle and voluptuous so liberally bestow upon unsuccessful fortitude and perseverance, than leave a country which we had discovered unexplored, and give colour to a charge of timidity and irresolution.

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Having now congratulated ourselves upon getting within the reef, notwithstanding we had so lately congratulated ourselves upon getting without it, I resolved to keep the main land on board in my future route to the northward, whatever the consequence might be; for if we had now gone without the reef again, it might have carried us so far from the coast, as to prevent my being able to determine, whether this country did, or did not, join to New Guinea; a question which I was determined to resolve from my first coming within sight of land. However, as I had experienced the disadvantage of having a boat under repair, at a time when it was possible I might want to use her, I determined to remain fast at anchor, till the pinnacle was perfectly refitted. As I had no employment for the other boats, I sent them out in the morning to the reef, to see what refresh-

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ments could be procured, and Mr. Banks, in his little boat, accompanied by Dr. Solander, went with them. In this situation I found the variation by amplitude and azimuth to be $4^{\circ} 9' E.$; and at noon, our latitude by observation was $12^{\circ} 38' S.$ and our longitude $216^{\circ} 45' W.$ The main land extended from N. 66 W. to S. W. by S. and the nearest part of it was distant about nine leagues. The opening through which we had passed, I called PROVIDENTIAL CHANNEL; and this bore E. N. E. distant ten or twelve miles: on the main land within us was a lofty promontory which I called CAPE WEYMOUTH; on the north side of which is a bay, which I called WEYMOUTH BAY: they lie in latitude $12^{\circ} 42' S.$, longitude $127^{\circ} 15' W.$ At four o'clock in the afternoon the boats returned with two hundred and forty pound of the meat of shell-fish, chiefly of cockles, some of which were as much as two men could move, and contained twenty pounds of good meat. Mr. Banks also brought back many curious shells, and *Mollusca*; besides many species of coral, among which was that called the *Tubipora musica*.

Saturday 18.

At six o'clock in the morning, we got under sail and stood away to the N. W. having two boats ahead to direct us; our soundings were very irregular, varying five or six fathom every cast, between ten and twenty-seven. A little before noon, we passed a low sandy island, which we left on our starboard side, at the distance of two miles. At noon, our latitude was $12^{\circ} 28'$, and our distance from the main about four leagues: it extended from S. by W. to N. 71 W. and some small islands from N. 40 W. to 54 W. Between us and the main were several shoals, and some without us, besides the main or outermost reef, which we could see from the mast-head, stretching away to the N. E. At two in the afternoon, as we were steering N. W. by N. we saw a large shoal right ahead, extending three or four points upon each bow;

bow; upon this we hauled up N. N. E. and N. E. by N. to get round the north point of it, which we reached by four, and then edged away to the westward, and ran between the north end of this shoal and another, which lies two miles to the northward of it, having a boat all the way ahead sounding; our depth of water was still very irregular, from twenty-two to eight fathom. At half an hour after six, we anchored in thirteen fathom: the northermost of the small islands seen at noon bore W. $\frac{1}{2}$ S. distant three miles: these islands are distinguished in the chart by the name of FORBES'S ISLANDS, and lie about five leagues from the main, which here forms a high point that we called BOLT HEAD, from which the land trends more westerly, and is in that direction all low and sandy; to the southward it is high and hilly even near the sea.

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At six in the morning we got again under sail, and steered for an island which lay at a small distance from the main, and at this time bore from us N. 40 W. distant about five leagues: our course was soon interrupted by shoals; however, by the help of the boats, and a good look-out from the top of the mast, we got into a fair channel that led us down to the island, between a very large shoal on our starboard side and several small ones towards the main: in this channel we had from twenty to thirty fathom water. Between eleven and twelve o'clock we hauled round the north east side of the island, leaving it between us and the main, from which it is distant about seven or eight miles. This island is about a league in circuit, and we saw upon it five of the natives, two of whom had lances in their hands; they came down upon a point, and having looked a little while at the ship, retired. To the N. W. of it are several low islands and quays, which lie not far from the main; and to the north-

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ward and eastward are several other islands and shoals; so that we were now encompassed on every side: but having lately been exposed to much greater danger, and rocks and shoals being grown familiar, we looked at them comparatively with little concern. The main land appeared to be low and barren, interspersed with large patches of the very fine white sand, which we had found upon Lizard Island and different parts of the main. The boats had seen many turtle upon the shoals which they passed, but it blew too hard for them to take any. At noon, our latitude by observation was 12° , and our longitude $217^{\circ} 25'$: our depth of water was fourteen fathom; and our course and distance, reduced to a strait line, was, between this time and the preceding noon N. 29 W. thirty two miles.

The main land within the islands that have been just mentioned forms a point, which I called CAPE GRENVILLE: it lies in latitude $11^{\circ} 58'$, longitude $217^{\circ} 38'$; and between it and Bolt Head is a bay, which I called TEMPLE BAY. At the distance of nine leagues from Cape Grenville, in the direction of E. $\frac{1}{2}$ N. lie some high islands, which I called SIR CHARLES HARDY'S ISLES; and those which lie off the Cape I called COCKBURN'S ISLES. Having lain by for the boats, which had got out of their station, till about one o'clock, we then took the yawl in tow; and the pinnace having got ahead, we filled, and stood N. by W. for some small islands which lay in that direction; such at least they were in appearance, but upon approaching them we perceived that they were joined together by a large reef: upon this we edged away N. W. and left them on our starboard hand; we steered between them and the islands that lay off the main, having a clear passage, and from fifteen to twenty-three fathom water. At four o'clock, we discovered some low islands and
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rocks, bearing W. N. W. and stood directly for them: at half an hour after six, we anchored on the north east side of the northermost of them, at one mile distance, and in sixteen fathom. These islands lie N. W. four leagues from Cape Grenville, and from the number of birds that I saw upon them, I called them BIRD ISLES. A little before sun-set, we were in sight of the main land, which appeared all very low and sandy, extending as far to the northward as N. W. by N. some shoals, quays, and low sandy isles stretching away to the N. E.

Monday 20.

At six o'clock in the morning, we got again under sail, with a fresh breeze at E. and stood away N. N. W. for some low islands in that direction, but were soon obliged to haul close upon a wind to weather a shoal which we discovered upon our larboard bow, having at the same time others to the eastward: by the time we had weathered this shoal to leeward, we had brought the islands well upon our lee bow, but seeing some shoals run off from them, and some rocks on our starboard bow, which we did not discover till we were very near them, I was afraid to go to windward of the islands, and therefore brought to, and having made the signal for the pinnace, which was ahead, to come on board, I sent her to leeward of the islands, with orders to keep along the edge of the shoal, which ran off from the south side of the southermost island, sending the yawl at the same time, to run over the shoal in search of turtle. As soon as the pinnace had got to a proper distance, we wore, and stood after her: as we ran to leeward of this island, we took the yawl in tow, she having seen only one small turtle, and therefore made but little stay upon the shoal. The island we found to be a small spot of sand, with some trees upon it, and we could discern many huts, or habitations of the natives, whom we supposed occasionally to visit these islands from

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the main, they being only five leagues distant, to catch turtle, when they come ashore to lay their eggs. We continued to stand after the pinnacle N. N. E. and N. by E. for two other low islands, having two shoals without us, and one between us and the main. At noon, we were about four leagues from the main, which we saw extending to the northward, as far as N. W. by N. all flat and sandy. Our latitude, by observation, was $11^{\circ} 23'$ S. and our longitude $217^{\circ} 46'$ W. our soundings were from fourteen to twenty-three fathom; but these, as well as the shoals and islands, which are too numerous to be particularly mentioned, will be best seen upon the chart. By one o'clock, we had run nearly the length of the southermost of the two islands in sight, and finding that the going to windward of them would carry us too far from the main, we bore up and ran to leeward, where finding a fair open passage, we steered N. by W. in a direction parallel to the main, leaving a small island which lay between it and the ship, and some low sandy isles and shoals without us, of all which we lost sight by four o'clock, and saw no more before the sun went down: at this time the farthest part of the land in sight bore N. N. W. $\frac{1}{2}$ W. and soon after we anchored in thirteen fathom, upon soft ground, at the distance of about five leagues from the land, where we lay till day-light.

Tuesday 21.

Early in the morning, we made sail again, and steered N. N. W. by compass, for the northermost land in sight; and at this time, we observed the variation of the needle to be $3^{\circ} 6'$ E. At eight o'clock, we discovered shoals ahead, and on our larboard bow, and saw that the northermost land, which we had taken for the main, was detached from it, and that we might pass between them, by running to leeward of the shoals on our larboard bow, which were now near us: we therefore wore and brought to, sending away the

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the pinnacle and yawl to direct us, and then steered N. W. along the S. W. or inside of the shoals, keeping a good look-out from the mast-head, and having another shoal on our larboard side: we found however a good channel of a mile broad between them, in which we had from ten to fourteen fathom. At eleven o'clock, we were nearly the length of the land detached from the main, and there appeared to be no obstruction in the passage between them, yet having the long-boat astern, and rigged, we sent her away to keep in shore upon our larboard bow, and at the same time dispatched the pinnacle a-starboard; precautions which I thought necessary, as we had a strong flood that carried us an end very fast, and it was near high water: as soon as the boats were ahead, we stood after them, and by noon, got through the passage. Our latitude, by observation, was then $10^{\circ} 36'$, and the nearest part of the main, which we soon after found to be the northermost, bore W. 2 S. distant between three or four miles: we found the land which was detached from the main, to be a single island, extending from N. to N. 75 E. distant between two and three miles; at the same time we saw other islands at a considerable distance, extending from N. by W. to W. N. W. and behind them another chain of high land, which we judged also to be islands: there were still other islands, extending as far as N. 71 W. which at this time we took for the main.

The point of the main which forms the side of the channel through which we had passed, opposite to the island, is the northern promontory of the country, and I called it YORK CAPE. Its longitude is $218^{\circ} 24'$ W. the latitude of the north point is $10^{\circ} 37'$, and of the east point $10^{\circ} 42'$ S. The land over the east point, and to the southward of it, is rather low, and as far as the eye can reach, very flat, and of a barren appearance.

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pearance. To the southward of the Cape the shore forms a large open bay, which I called NEWCASTLE BAY, and in which are some small low islands and shoals; the land adjacent is also very low, flat, and sandy. The land of the northern part of the Cape is more hilly, the vallies seem to be well clothed with wood, and the shore forms some small bays, in which there appeared to be good anchorage. Close to the eastern point of the Cape are three small islands, from one of which a small ledge of rocks runs out into the sea: there is also an island close to the northern point. The island that forms the freight or channel through which we had passed, lies about four miles without these, which, except two, are very small: the southernmost is the largest, and much higher than any part of the main land. On the north west side of this island there appeared to be good anchorage, and on shore, vallies that promised both wood and water. These islands are distinguished in the chart by the name of YORK ISLES. To the southward, and south east, and even to the eastward and northward of them, there are several other low islands, rocks, and shoals: our depth of water in sailing between them and the main, was twelve, thirteen, and fourteen fathom.

We stood along the shore to the westward, with a gentle breeze at S. E. by S. and when we had advanced between three and four miles, we discovered the land ahead, which, when we first saw it, we took for the main, to be islands detached from it by several channels: upon this we sent away the boats, with proper instructions, to lead us through that channel which was next the main; but soon after discovering rocks and shoals in this channel, I made a signal for the boats to go through the next channel to the northward, which lay between these islands, leaving some of them between us and the

the main: the ship followed, and had never less than five fathom water in the narrowest part of the channel, where the distance from island to island was about one mile and an half.

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At four o'clock in the afternoon, we anchored, being about a mile and a half, or two miles, within the entrance, in six fathom and a half, with clear ground: the channel here had begun to widen, and the islands on each side of us were distant about a mile: the main land stretched away to the S. W. the farthest point in view bore S. 48 W. and the southermost point of the islands, on the north west side of the passage, bore S. 76 W. Between these two points we could see no land, so that we conceived hopes of having, at last, found a passage into the Indian sea; however, that I might be able to determine with more certainty, I resolved to land upon the island which lies at the south east point of the passage. Upon this island we had seen many of the inhabitants when we first came to an anchor, and when I went into the boat, with a party of men, accompanied by Mr. Banks and Dr. Solander, in order to go ashore, we saw ten of them upon a hill: nine of them were armed with such lances as we had been used to see, and the tenth had a bow, and a bundle of arrows, which we had never seen in the possession of the natives of this country before: we also observed, that two of them had large ornaments of mother of pearl hanging round their necks. Three of these, one of whom was the bowman, placed themselves upon the beach abreast of us, and we expected that they would have opposed our landing, but when we came within about a musket's shot of the beach, they walked leisurely away. We immediately climbed the highest hill, which was not more than three times as high as the mast-head, and the most barren of

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any we had seen. From this hill, no land could be seen between the S. W. and W. S. W. so that I had no doubt of finding a channel through. The land to the north west of it consisted of a great number of islands of various extent, and different heights, ranged one behind another, as far to the northward and westward as I could see, which could not be less than thirteen leagues. As I was now about to quit the eastern coast of New Holland, which I had coasted from latitude 38 to this place, and which I am confident no European had ever seen before, I once more hoisted English colours, and though I had already taken possession of several particular parts, I now took possession of the whole eastern coast, from latitude 38° to this place, latitude 10½ S. in right of his Majesty King George the Third, by the name of NEW SOUTH WALES, with all the bays, harbours, rivers, and islands situated upon it: we then fired three vollies of small arms, which were answered by the same number from the ship. Having performed this ceremony upon the island, which we called POSSESSION ISLAND, we reembarked in our boat, but a rapid ebb tide setting N. E. made our return to the vessel very difficult and tedious. From the time of our last coming among the shoals, we constantly found a moderate tide, the flood setting to the N. W. and the ebb to the S. E. At this place, it is high water at the full and change of the moon, about one or two o'clock, and the water rises and falls perpendicularly about twelve feet. We saw smoke rising in many places from the adjacent lands and islands, as we had done upon every part of the coast, after our last return to it through the reef.

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We continued at anchor all night, and between seven and eight o'clock in the morning, we saw three or four of the natives upon the beach gathering shell-fish; we discovered,
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by the help of our glaffes, that they were women, and, like all the other inhabitants of this country, stark naked. At low water, which happened about ten o'clock, we got under fail, and stood to the S. W. with a light breeze at E. which afterwards veered to N. by E.: our depth of water was from six to ten fathom, except in one place, where we had but five. At noon, Possession Island bore N. 53 E. distant four leagues, the western extremity of the main land in sight bore S. 43 W. distant between four and five leagues, and appeared to be extremely low, the south west point of the largest island on the north west side of the passage bore N. 71 W. distant eight miles, and this point I called CAPE CORNWALL. It lies in latitude $10^{\circ} 43'$ S., longitude 219° W.; and some low lands that lie about the middle of the passage, which I called WALLIS'S ISLES, bore W. by S. $\frac{1}{2}$ S. distant about two leagues: our latitude, by observation, was $10^{\circ} 46'$ S. We continued to advance with the tide of flood W. N. W. having little wind, and from eight to five fathom water. At half an hour after one, the pinnacle, which was ahead, made the signal for shoal water, upon which we tacked, and sent away the yawl to sound also: we then tacked again, and stood after them: in about two hours, they both made the signal for shoal water, and the tide being nearly at its greatest height, I was afraid to stand on, as running aground at that time might be fatal; I therefore came to an anchor in somewhat less than seven fathom, sandy ground. Wallis's islands bore S. by W. $\frac{1}{2}$ W. distant five or six miles, the islands to the northward extended from S. 73 E. to N. 10 E. and a small island, which was just in sight, bore N. W. $\frac{1}{2}$ W. Here we found the flood tide set to the westward, and the ebb to the eastward.

After we had come to an anchor, I sent away the Master in the long-boat to sound, who, upon his return in the evening,

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evening, reported, that there was a bank stretching north and south, upon which there were but three fathom, and that beyond it there were seven. About this time it fell calm, and continued so till nine the next morning, when we weighed, with a light breeze at S. S. E. and steered N. W. by W. for the small island which was just in sight, having first sent the boats ahead to sound: the depth of water was eight, seven, six, five, and four fathom, and three fathom upon the bank, it being now the last quarter ebb. At this time, the northermost island in sight bore N. 9 E. Cape Cornwall E. distant three leagues, and Wallis's Isles S. 3 E. distant three leagues. This bank, at least so much as we have sounded, extends nearly N. and S. but to what distance I do not know: its breadth is not more than half a mile at the utmost. When we had got over the bank, we deepened our water to six fathom three quarters, and had the same depth all the way to the small island ahead, which we reached by noon, when it bore S. distant about half a mile. Our depth of water was now five fathom, and the northermost land in sight, which is part of the same chain of islands that we had seen to the northward from the time of our first entering the strait, bore N. 71 E. Our latitude, by observation, was $10^{\circ} 33' S.$ and our longitude $219^{\circ} 22' W.$: in this situation, no part of the main was in sight. As we were now near the island, and had but little wind, Mr. Banks and I landed upon it, and found it, except a few patches of wood, to be a barren rock, the haunt of birds, which had frequented it in such numbers, as to make the surface almost uniformly white with their dung: of these birds, the greater part seemed to be boobies, and I therefore called the place BOOBY ISLAND. After a short stay, we returned to the ship, and in the mean time the wind had got to the S. W.; it was but a gentle breeze, yet it was accompanied by a swell from the same

quarter, which, with other circumstances, confirmed my opinion that we were got to the westward of Carpentaria, or the northern extremity of New Holland, and had now an open sea to the westward, which gave me great satisfaction, not only because the dangers and fatigues of the voyage were drawing to an end, but because it would no longer be a doubt whether New Holland and New Guinea were two separate islands, or different parts of the same.

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The north east entrance of this passage, or freight, lies in the latitude of $10^{\circ} 39'$ S. and in the longitude of $218^{\circ} 36'$ W. It is formed by the main, or the northern extremity of New Holland, on the S. E. and by a congeries of islands, which I called the PRINCE OF WALES'S ISLANDS, to the N. W. and it is probable that these islands extend quite to New Guinea. They differ very much both in height and circuit, and many of them seemed to be well clothed with herbage and wood: upon most, if not all of them, we saw smoke, and therefore there can be no doubt of their being inhabited: it is also probable, that among them there are at least as good passages as that we came through, perhaps better, though better would not need to be desired, if the access to it, from the eastward, were less dangerous: that a less dangerous access may be discovered, I think there is little reason to doubt, and to find it little more seems to be necessary, than to determine how far the principal, or outer reef, which bounds the shoals to the eastward, extends towards the north, which I would not have left to future navigators if I had been less harassed by danger and fatigue, and had had a ship in better condition for the purpose.

To this channel, or passage, I have given the name of the ship, and called it ENDEAVOUR STREIGHTS. Its length from N. E. to S. W. is ten leagues, and it is about five leagues

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broad; except at the north east entrance, where it is somewhat less than two miles, being contracted by the islands which lie there. That which I called Possession Island is of a moderate height and circuit, and this we left between us and the main, passing between it and two small round islands, which lie about two miles to the N. W. of it. The two small islands, which I called Wallis's Islands, lie in the middle of the south west entrance, and these we left to the southward. Our depth of water in the strait, was from four to nine fathom, with every where good anchorage, except upon the bank, which lies two leagues to the northward of Wallis's Islands, where, at low water, there are but three fathom: for a more particular knowledge of this strait, and of the situations of the several islands and shoals on the eastern coast of New Wales, I refer to the chart, where they are delineated with all the accuracy that circumstances would admit; yet, with respect to the shoals, I cannot pretend that one half of them are laid down, nor can it be supposed possible that one half of them should be discovered in the course of a single navigation: many islands also must have escaped my pencil, especially between latitude 20° and 22° , where we saw islands out at sea as far as an island could be distinguished; it must not therefore be supposed, by future navigators, that where no shoal or island is laid down in my chart, no shoal or island will be found in these seas: it is enough that the situation of those that appear in the chart is faithfully ascertained, and, in general, I have the greatest reason to hope that it will be found as free from error as any that has not been corrected by subsequent and successive observations. The latitudes and longitudes of all, or most of the principal head lands and bays, may be confided in, for we seldom failed of getting an observation once at least every day, by which to correct the latitude of our reckoning,

reckoning, and observations for settling the longitude were equally numerous, no opportunity that was offered by the sun and moon being suffered to escape. It would be injurious to the memory of Mr. Green, not to take this opportunity of attesting that he was indefatigable both in making observations and calculating upon them; and that, by his instructions and assistance, many of the petty officers were enabled both to observe and calculate with great exactness. This method of finding the longitude at sea, may be put into universal practice, and may always be depended upon within half a degree, which is sufficient for all nautical purposes. If, therefore, observing and calculating were considered as necessary qualifications for every sea officer, the labours of the speculative theorist to solve this problem might be remitted, without much injury to mankind: neither will it be so difficult to acquire this qualification, or put it in practice, as may at first appear; for, with the assistance of the nautical almanack, and astronomical ephemeris, the calculations for finding the longitude will take up little more time than the calculation of an azimuth for finding the variation of the compass.

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C H A P. VIII.

Departure from New South Wales; a particular Description of the Country, its Products, and People: A Specimen of the Language, and some Observations upon the Currents and Tides.

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OF this country, its products, and its people, many particulars have already been related in the course of the narrative, being so interwoven with the events, as not to admit of a separation. I shall now give a more full and circumstantial description of each, in which, if some things should happen to be repeated, the greater part will be found new.

New Holland, or, as I have now called the eastern coast, New South Wales, is of a larger extent than any other country in the known world that does not bear the name of a continent: the length of coast along which we sailed, reduced to a strait line, is no less than twenty-seven degrees of latitude, amounting to near 2000 miles, so that its square surface must be much more than equal to all Europe. To the southward of 33 or 34, the land in general is low and level; farther northward it is hilly, but in no part can be called mountainous, and the hills and mountains, taken together, make but a small part of the surface, in comparison with the vallies and plains. It is upon the whole rather barren than fertile, yet the rising ground is chequered by woods and lawns, and the plains and vallies are in many places covered with herbage: the soil however is frequently sandy, and

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and many of the lawns, or savannahs, are rocky and barren, especially to the northward, where, in the best spots, vegetation was less vigorous than in the southern part of the country; the trees were not so tall, nor was the herbage so rich. The grass in general is high, but thin, and the trees, where they are largest, are seldom less than forty feet asunder; nor is the country inland, as far as we could examine it, better clothed than the sea coast. The banks of the bays are covered with mangroves, to the distance of a mile within the beach, under which the soil is a rank mud, that is always overflowed by a spring tide; farther in the country we sometimes met with a bog, upon which the grass was very thick and luxuriant, and sometimes with a valley, that was clothed with underwood: the soil in some parts seemed to be capable of improvement, but the far greater part is such as can admit of no cultivation. The coast, at least that part of it which lies to the northward of 25° S. abounds with fine bays and harbours, where vessels may lie in perfect security from all winds.

If we may judge by the appearance of the country while we were there, which was in the very height of the dry season, it is well watered: we found innumerable small brooks and springs, but no great rivers; these brooks, however, probably become large in the rainy season. Thirsty Sound was the only place where fresh water was not to be procured for the ship, and even there one or two small pools were found in the woods, though the face of the country was every where intersected by salt-creeks, and mangrove land.

Of trees there is no great variety. Of those that could be called timber, there are but two sorts; the largest is the gum tree, which grows all over the country, and has been mentioned.

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tioned already: it has narrow leaves, not much unlike a willow; and the gum, or rather resin, which it yields, is of a deep red, and resembles the *sanguis draconis*; possibly it may be the same, for this substance is known to be the produce of more than one plant. It is mentioned by Dampier, and is perhaps the same that Tasman found upon Diemen's Land, where he says he saw "Gum of the trees, and gum lac of the ground." The other timber tree is that which grows somewhat like our pines, and has been particularly mentioned in the account of Botany Bay. The wood of both these trees, as I have before remarked, is extremely hard and heavy. Besides these, here are trees covered with a soft bark that is easily peeled off, and is the same that in the East Indies is used for the caulking of ships.

We found here the palm of three different sorts. The first, which grows in great plenty to the southward, has leaves that are plaited like a fan: the cabbage of these is small, but exquisitely sweet; and the nuts, which it bears in great abundance, are very good food for hogs. The second sort bore a much greater resemblance to the true cabbage tree of the West Indies; its leaves were large and pinnated, like those of the cocoa-nut; and these also produced a cabbage, which though not so sweet as the other, was much larger. The third sort, which, like the second, was found only in the northern parts, was seldom more than ten feet high, with small pinnated leaves, resembling those of some kind of fern: it bore no cabbage, but a plentiful crop of nuts, about the size of a large chestnut, but rounder: as we found the hulls of these scattered round the places where the Indians had made their fires, we took for granted that they were fit to eat; those however who made the experiment paid dear for their knowledge of the contrary, for
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they operated both as an emetic and cathartic with great violence. Still, however, we made no doubt but that they were eaten by the Indians; and judging that the constitution of the hogs might be as strong as theirs, though our own had proved to be so much inferior, we carried them to the sty; the hogs eat them, indeed, and for some time we thought without suffering any inconvenience; but in about a week they were so much disordered that two of them died, and the rest were recovered with great difficulty. It is probable, however, that the poisonous quality of these nuts may lie in the juice, like that of the cassada of the West Indies; and that the pulp, when dried, may be not only wholesome, but nutritious. Besides these species of the palm, and mangroves, there were several small trees and shrubs altogether unknown in Europe; particularly one which produced a very poor kind of fig; another that bore what we called a plum, which it resembled in colour, but not in shape, being flat on the sides like a little cheese; and a third that bore a kind of purple apple; which, after it had been kept a few days, became eatable, and tasted somewhat like a damascene.

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Here is a great variety of plants to enrich the collection of a botanist, but very few of them are of the æsculent kind. A small plant, with long, narrow, grassy leaves, resembling that kind of bulrush which in England is called the Cat's-tail, yields a resin of a bright yellow colour, exactly resembling gamboge, except that it does not stain; it has a sweet smell, but its properties we had no opportunity to discover, any more than those of many others with which the natives appear to be acquainted, as they have distinguished them by names.

I have already mentioned the root and leaves of a plant resembling the cocos of the West Indies, and a kind of

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bean; to which may be added, a sort of parsley and purselain, and two kinds of yams; one shaped like a radish, and the other round, and covered with stringy fibres: both sorts are very small, but sweet; and we never could find the plants that produced them, though we often saw the places where they had been newly dug up; it is probable that the drought had destroyed the leaves, and we could not, like the Indians, discover them by the stalks.

Most of the fruits of this country, such as they are, have been mentioned already. We found one in the southern part of the country resembling a cherry, except that the stone was soft; and another not unlike a pine-apple in appearance, but of a very disagreeable taste, which is well known in the East Indies, and is called by the Dutch *Pyn Appel Boomen*.

Of the quadrupeds, I have already mentioned the dog, and particularly described the kangaroo, and the animal of the opossum kind, resembling the phalanger of Buffon; to which I can add only one more, resembling a polecat, which the natives call *Quoll*; the back is brown, spotted with white, and the belly white unmixed. Several of our people said they had seen wolves; but perhaps, if we had not seen tracts that favoured the account, we might have thought them little more worthy of credit than he who reported that he had seen the devil.

Of bats, which hold a middle place between the beasts and the birds, we saw many kinds, particularly one which, as I have observed already, was larger than a partridge; we were not fortunate enough to take one either alive or dead, but it was supposed to be the same as Buffon has described by the name of *Rouset* or *Rouget*.

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The sea and other water-fowl of this country, are gulls, shaggs, soland geese, or gannets, of two sorts; boobies, noddies, curlews, ducks, pelicans of an enormous size, and many others. The land-birds, are crows, parrots, paroquets, cockatoos, and other birds of the same kind, of exquisite beauty; pigeons, doves, quails, bustards, herons, cranes, hawks, and eagles. The pigeons flew in numerous flocks, so that, notwithstanding their extreme shyness, our people frequently killed ten or twelve of them in a day: these birds are very beautiful, and crested very differently from any we had seen before.

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Among other reptiles, here are serpents of various kinds, some noxious, and some harmless; scorpions, centipeds, and lizards. The insects are but few. The principal are the musquito, and the ant. Of the ant there are several sorts; some are as green as a leaf, and live upon trees, where they build their nests of various sizes, between that of a man's head and his fist. These nests are of a very curious structure: they are formed by bending down several of the leaves, each of which is as broad as a man's hand, and gluing the points of them together, so as to form a purse; the viscus used for this purpose, is an animal juice, which Nature has enabled them to elaborate. Their method of first bending down the leaves, we had not an opportunity to observe; but we saw thousands uniting all their strength to hold them in this position, while other busy multitudes were employed within, in applying the gluten that was to prevent their returning back. To satisfy ourselves that the leaves were bent, and held down by the effort of these diminutive artificers, we disturbed them in their work, and as soon as they were driven from their station, the leaves on which they were employed sprung up with a force much greater than we

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could have thought them able to conquer by any combination of their strength. But though we gratified our curiosity at their expence, the injury did not go unrevenge; for thousands immediately threw themselves upon us, and gave us intolerable pain with their stings, especially those which took possession of our necks and our hair, from whence they were not easily driven: the sting was scarcely less painful than that of a bee; but, except it was repeated, the pain did not last more than a minute.

Another sort are quite black, and their operations and manner of life are not less extraordinary. Their habitations are the inside of the branches of a tree, which they contrive to excavate by working out the pith almost to the extremity of the slenderest twig; the tree at the same time flourishing, as if it had no such inmate. When we first found the tree, we gathered some of the branches, and were scarcely less astonished than we should have been to find that we had profaned a consecrated grove, where every tree, upon being wounded, gave signs of life; for we were instantly covered with legions of these animals, swarming from every broken bough, and inflicting their stings with incessant violence. They are mentioned by Rumphius in his *Herbarium Amboinense*, vol. ii. p. 257.; but the tree in which he saw their dwelling, is very different from that in which we found them.

A third kind we found nested in the root of a plant, which grows on the bark of trees in the manner of mistletoe, and which they had perforated for that use. This root is commonly as big as a large turnip, and sometimes much bigger: when we cut it, we found it intersected by innumerable winding passages, all filled with these animals, by which however the vegetation of the plant did not appear to

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have

have suffered any injury. We never cut one of these roots that was not inhabited, though some were not bigger than a hazle-nut. The animals themselves are very small, not more than half as big as the common red ant in England. They had stings, but scarcely force enough to make them felt; they had however a power of tormenting us in an equal, if not a greater degree; for the moment we handled the root, they swarmed from innumerable holes, and running about those parts of the body that were uncovered, produced a titillation more intolerable than pain, except it is increased to great violence. Rumphius has also given an account of this bulb and its inhabitants, vol. vi. p. 120. where he mentions another sort that are black.

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We found a fourth kind, which are perfectly harmless, and almost exactly resemble the white-ants of the East Indies; the architecture of these is still more curious than that of the others. They have houses of two sorts, one is suspended on the branches of trees, and the other erected upon the ground: those upon the trees are about three or four times as big as a man's head, and are built of a brittle substance, which seems to consist of small parts of vegetables kneaded together with a glutinous matter, which their bodies probably supply; upon breaking this crust, innumerable cells, swarming with inhabitants, appear in a great variety of winding directions, all communicating with each other, and with several apertures that lead to other nests upon the same tree: they have also one large avenue, or covered way, leading to the ground, and carried on under it to the other nest or house that is constructed there. This house is generally at the root of a tree, but not of that upon which their other dwellings are constructed: it is formed like an irregularly sided cone, and sometimes is more than six feet high,

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high, and nearly as much in diameter. Some are smaller, and these are generally flat sided, and very much resemble in figure the stones which are seen in many parts of England, and supposed to be the remains of druidical antiquity. The outside of these is of well tempered clay, about two inches thick; and within are the cells, which have no opening outwards, but communicate only with the subterranean way to the houses on the tree, and to the tree near which they are constructed, where they ascend up the root, and so up the trunk and branches, under covered ways of the same kind as those by which they descended from their other dwellings. To these structures on the ground they probably retire in the winter, or rainy seasons, as they are proof against any wet that can fall; which those in the tree, though generally constructed under some overhanging branch, from the nature and thinness of their crust or wall, cannot be.

The sea in this country is much more liberal of food to the inhabitants than the land; and though fish is not quite so plenty here as they generally are in higher latitudes, yet we seldom hauled the seine without taking from fifty to two hundred weight. They are of various sorts; but, except the mullet, and some of the shell-fish, none of them are known in Europe: most of them are palatable, and some are very delicious. Upon the shoals and reef there are incredible numbers of the finest green turtle in the world, and oysters of various kinds, particularly the rock-oyster and the pearl-oyster. The gigantic cockles have been mentioned already; besides which there are sea-crayfish, or lobsters, and crabs; of these however we saw only the shells. In the rivers and salt creeks there are aligators.

The

The only person who has hitherto given any account of this country or its inhabitants is Dampier, and though he is, in general, a writer of credit, yet in many particulars he is mistaken. The people whom he saw were indeed inhabitants of a part of the coast very distant from that which we visited; but we also saw inhabitants upon parts of the coast very distant from each other, and there being a perfect uniformity in person and customs among them all, it is reasonable to conclude, that distance in another direction has not considerably broken it.

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The number of inhabitants in this country appears to be very small in proportion to its extent. We never saw so many as thirty of them together but once, and that was at Botany Bay, when men, women, and children, assembled upon a rock to see the ship pass by: when they manifestly formed a resolution to engage us, they never could muster above fourteen or fifteen fighting men; and we never saw a number of their sheds or houses together that could accommodate a larger party. It is true, indeed, that we saw only the sea-coast on the eastern side; and that, between this and the western shore, there is an immense tract of country wholly unexplored: but there is great reason to believe that this immense tract is either wholly desolate; or at least still more thinly inhabited than the parts we visited. It is impossible that the inland country should subsist inhabitants at all seasons without cultivation; it is extremely improbable that the inhabitants of the coast should be totally ignorant of arts of cultivation, which were practised inland; and it is equally improbable that, if they knew such arts, there should be no traces of them among them. It is certain that we did not see one foot of ground in a state of cultivation in the whole country; and therefore it may well be concluded that where
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the sea does not contribute to feed the inhabitants, the country is not inhabited.

The only tribe with which we had any intercourse, we found where the ship was careened; it consisted of one and twenty persons; twelve men, seven women, one boy, and one girl: the women we never saw but at a distance; for when the men came over the river they were always left behind. The men here, and in other places, were of a middle size, and in general well made, clean limbed, and remarkably vigorous, active, and nimble: their countenances were not altogether without expression, and their voices were remarkably soft and effeminate.

Their skins were so uniformly covered with dirt, that it was very difficult to ascertain their true colour: we made several attempts, by wetting our fingers and rubbing it, to remove the incrustations, but with very little effect. With the dirt they appear nearly as black as a Negroe; and according to our best discoveries, the skin itself is of the colour of wood foot, or what is commonly called a chocolate colour. Their features are far from being disagreeable, their noses are not flat, nor are their lips thick; their teeth are white and even, and their hair naturally long and black, it is however universally cropped short; in general it is straight, but sometimes it has a slight curl; we saw none that was not matted and filthy, though without oil or grease, and to our great astonishment free from lice. Their beards were of the same colour with their hair, and bushy and thick: they are not however suffered to grow long. A man whom we had seen one day with his beard somewhat longer than his companions, we saw the next, with it somewhat shorter, and upon examination found the ends of the hairs burnt: from this incident, and our having never seen any sharp instru-
ment

ment among them, we concluded that both the hair and the beard were kept short by singeing them.

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Both sexes, as I have already observed, go stark naked, and seem to have no more sense of indecency in discovering the whole body, than we have in discovering our hands and face. Their principal ornament is the bone which they thrust through the cartilage that divides the nostrils from each other: what perversion of taste could make them think this a decoration, or what could prompt them, before they had worn it or seen it worn, to suffer the pain and inconvenience that must of necessity attend it, is perhaps beyond the power of human sagacity to determine: as this bone is as thick as a man's finger, and between five and six inches long, it reaches quite across the face, and so effectually stops up both the nostrils that they are forced to keep their mouths wide open for breath, and snuffle so when they attempt to speak, that they are scarcely intelligible even to each other. Our seamen, with some humour, called it their spritsail-yard; and indeed it had so ludicrous an appearance, that till we were used to it, we found it difficult to refrain from laughter. Beside this nose-jewel, they had necklaces made of shells, very neatly cut and strung together; bracelets of small cord, wound two or three times about the upper part of their arm, and a string of plaited human hair about as thick as a thread of yarn, tied round the waist. Besides these, some of them had gorgets of shells hanging round the neck, so as to reach cross the breast. But though these people wear no clothes, their bodies have a covering besides the dirt, for they paint them both white and red: the red is commonly laid on in broad patches upon the shoulders and breast; and the white in stripes, some narrow, and some broad: the narrow were drawn over the limbs, and the broad over the body, not without some degree of taste. The white

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was also laid on in small patches upon the face, and drawn in a circle round each eye. The red seemed to be ochre, but what the white was we could not discover; it was close grained, saponaceous to the touch, and almost as heavy as white lead; possibly it might be a kind of *Steatites*, but to our great regret we could not procure a bit of it to examine. They have holes in their ears, but we never saw any thing worn in them. Upon such ornaments as they had, they set so great a value, that they would never part with the least article for any thing we could offer; which was the more extraordinary as our beads and ribbons were ornaments of the same kind, but of a more regular form and more showy materials. They had indeed no idea of traffic, nor could we communicate any to them: they received the things that we gave them; but never appeared to understand our signs when we required a return. The same indifference which prevented them from buying what we had, prevented them also from attempting to steal: if they had coveted more, they would have been less honest; for when we refused to give them a turtle, they were enraged, and attempted to take it by force, and we had nothing else upon which they seemed to set the least value; for, as I have before observed, many of the things that we had given them, we found left negligently about in the woods, like the playthings of children, which please only while they are new. Upon their bodies we saw no marks of disease or sores, but large scars in irregular lines, which appeared to be the remains of wounds which they had inflicted upon themselves with some blunt instrument, and which we understood by signs to have been memorials of grief for the dead.

They appeared to have no fixed habitations, for we saw nothing like a town or village in the whole country. Their houses, if houses they may be called, seem to be formed
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with less art and industry than any we had seen, except the wretched hovels at Terra del Fuego, and in some respects they are inferior even to them. At Botany Bay, where they were best, they were just high enough for a man to sit upright in; but not large enough for him to extend himself in his whole length in any direction: they are built with pliable rods about as thick as a man's finger, in the form of an oven, by sticking the two ends into the ground, and then covering them with palm leaves, and broad pieces of bark: the door is nothing but a large hole at one end, opposite to which the fire is made, as we perceived by the ashes. Under these houses, or sheds, they sleep, coiled up with their heels to their head; and in this position one of them will hold three or four persons. As we advanced northward, and the climate became warmer, we found these sheds still more slight: they were built, like the others, of twigs, and covered with bark; but none of them were more than four feet deep, and one side was intirely open: the close side was always opposed to the course of the prevailing wind, and opposite to the open side was the fire, probably more as a defence from the musquitos than the cold. Under these hovels it is probable, that they thrust only their heads and the upper part of their bodies, extending their feet towards the fire. They were set up occasionally by a wandering hord, in any place that would furnish them for a time with subsistence, and left behind them when, after it was exhausted, they went away: but in places where they remained only for a night or two, they slept without any shelter, except the bushes or grafs, which is here near two feet high. We observed, however, that though the sleeping huts which we found upon the main, were always turned from the prevailing wind, those upon the islands were turned towards it; which seems to be a proof that they have a mild season here, during which

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the sea is calm, and that the same weather which enables them to visit the islands, makes the air welcome even while they sleep.

The only furniture belonging to these houses that fell under our observation, is a kind of oblong vessel made of bark, by the simple contrivance of tying up the two ends with a withy, which not being cut off serves for a handle; these we imagined were used as buckets to fetch water from the spring, which may be supposed sometimes to be at a considerable distance. They have however a small bag, about the size of a moderate cabbage-net, which is made by laying threads loop within loop, somewhat in the manner of knitting used by our ladies to make purses. This bag the man carries loose upon his back by a small string which passes over his head; it generally contains a lump or two of paint and resin, some fish-hooks and lines, a shell or two, out of which their hooks are made, a few points of darts, and their usual ornaments, which includes the whole worldly treasure of the richest man among them.

Their fish-hooks are very neatly made, and some of them are exceedingly small. For striking turtle they have a peg of wood which is about a foot long, and very well bearded; this fits into a socket at the end of a staff of light wood, about as thick as a man's wrist, and about seven or eight feet long: to the staff is tied one end of a loose line about three or four fathom long, the other end of which is fastened to the peg. To strike the turtle, the peg is fixed into the socket, and when it has entered his body, and is retained there by the barb, the staff flies off and serves for a float to trace their victim in the water; it assists also to tire him, till they can overtake him with their canoes, and haul him ashore. One of these pegs, as I have mentioned already, we found buried in the
body

body of a turtle, which had healed up over it. Their lines are from the thickness of a half inch rope to the fineness of a hair, and are made of some vegetable substance, but what in particular we had no opportunity to learn.

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Their food is chiefly fish, though they sometimes contrive to kill the kangaroo, and even birds of various kinds; notwithstanding they are so shy that we found it difficult to get within reach of them with a fowling-piece. The only vegetable that can be considered as an article of food is the yam; yet doubtless they eat the several fruits which have been mentioned among other productions of the country; and indeed we saw the shells and hulls of several of them lying about the places where they had kindled their fire.

They do not appear to eat any animal food raw; but having no vessel in which water can be boiled, they either broil it upon the coals, or bake it in a hole by the help of hot stones, in the same manner as is practised by the inhabitants of the islands in the South Seas.

Whether they are acquainted with any plant that has an intoxicating quality, we do not know; but we observed that several of them held leaves of some sort constantly in their mouths, as an European does tobacco, and an East Indian betel: we never saw the plant, but when they took it from their mouths at our request; possibly it might be a species of the betel, but whatever it was, it had no effect upon the teeth or the lips.

As they have no nets, they catch fish only by striking, or with a hook and line, except such as they find in the hollows of the rocks and shoals, which are dry at half ebb.

Their manner of hunting we had no opportunity to see; but we conjectured by the notches which they had everywhere

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where cut in large trees in order to climb them, that they took their station near the tops of them, and there watched for such animals as might happen to pass near enough to be reached by their lances: it is possible also, that in this situation they might take birds when they came to roost.

I have observed that when they went from our tents upon the banks of Endeavour river, we could trace them by the fires which they kindled in their way; and we imagined that these fires were intended some way for the taking the kangaroo, which we observed to be so much afraid of fire, that our dogs could scarcely force it over places which had been newly burnt, though the fire was extinguished.

They produce fire with great facility, and spread it in a wonderful manner. To produce it they take two pieces of dry soft wood, one is a stick about eight or nine inches long, the other piece is flat: the stick they shape into an obtuse point at one end, and pressing it upon the other, turn it nimbly by holding it between both their hands as we do a chocolate mill, often shifting their hands up, and then moving them down upon it, to increase the pressure as much as possible. By this method they get fire in less than two minutes, and from the smallest spark they increase it with great speed and dexterity. We have often seen one of them run along the shore, to all appearance with nothing in his hand, who stooping down for a moment, at the distance of every fifty or a hundred yards, left fire behind him, as we could see first by the smoke, and then by the flame among the drift wood, and other litter which was scattered along the place. We had the curiosity to examine one of these planters of fire, when he set off, and we saw him wrap up a small spark in dry grass, which, when he had run a little way, having been fanned by the air that his motion produced, began

began to blaze; he then laid it down in a place convenient for his purpose, inclosing a spark of it in another quantity of grass, and so continued his course.

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There are perhaps few things in the history of mankind more extraordinary than the discovery and application of fire: it will scarcely be disputed that the manner of producing it, whether by collision or attrition, was discovered by chance: but its first effects would naturally strike those to whom it was a new object, with consternation and terror: it would appear to be an enemy to life and nature, and to torment and destroy whatever was capable of being destroyed or tormented; and therefore it seems not easy to conceive what should incline those who first saw it receive a transient existence from chance, to reproduce it by design. It is by no means probable that those who first saw fire, approached it with the same caution, as those who are familiar with its effects, so as to be warmed only and not burnt; and it is reasonable to think that the intolerable pain which, at its first appearance, it must produce upon ignorant curiosity, would sow perpetual enmity between this element and mankind; and that the same principle which incites them to crush a serpent, would incite them to destroy fire, and avoid all means by which it would be produced, as soon as they were known. These circumstances considered, how men became sufficiently familiar with it to render it useful, seems to be a problem very difficult to solve: nor is it easy to account for the first application of it to culinary purposes, as the eating both animal and vegetable food raw, must have become a habit, before there was fire to dress it, and those who have considered the force of habit will readily believe, that to men who had always eaten the flesh of animals raw, it would be as disagreeable dressed, as to those who have always eaten it dressed, it would be raw. It is remarkable that the inhabi-

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tants of Terra del Fuego produce fire from a spark by collision, and that the happier natives of this country, New Zealand, and Otaheite, produce it by the attrition of one combustible substance against another: is there not then some reason to suppose that these different operations correspond with the manner in which chance produced fire in the neighbourhood of the torrid and frigid zones? Among the rude inhabitants of a cold country, neither any operation of art, or occurrence of accident, could be supposed so easily to produce fire by attrition, as in a climate where every thing is hot, dry, and adust, teeming with a latent fire which a slight degree of motion was sufficient to call forth; in a cold country therefore, it is natural to suppose that fire was produced by the accidental collision of two metallic substances, and in a cold country, for that reason, the same expedient was used to produce it by design: but in hot countries, where two combustible substances easily kindle by attrition, it is probable that the attrition of such substances first produced fire, and here it was therefore natural for art to adopt the same operation, with a view to produce the same effect. It may indeed be true that fire is now produced in many cold countries by attrition, and in many hot by a stroke; but perhaps upon enquiry there may appear reason to conclude that this has arisen from the communication of one country with another, and that with respect to the original production of fire in hot and cold countries, the distinction is well founded.

There may perhaps be some reason to suppose that men became gradually acquainted with the nature and effects of fire, by its permanent existence in a volcano, there being remains of volcanoes, or vestiges of their effects, in almost every part of the world: by a volcano, however, no method of producing fire, otherwise than by contact, could be learnt;
the

the production and application of fire therefore, still seem to afford abundant subject of speculation to the curious.

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The weapons of these people are spears or lances, and these are of different kinds: some that we saw upon the southern part of the coast had four prongs, pointed with bone, and barbed; the points were also smeared with a hard resin, which gave them a polish, and made them enter deeper into what they struck. To the northward, the lance has but one point: the shaft is made of cane, or the stalk of a plant somewhat resembling a bulrush, very strait and light, and from eight to fourteen feet long, consisting of several joints, where the pieces are let into each other, and bound together; to this are fitted points of different kinds; some are of hard heavy wood, and some are the bones of fish: we saw several that were pointed with the stings of the sting-ray, the largest that they could procure, and barbed with several that were smaller, fastened on in a contrary direction; the points of wood were also sometimes armed with sharp pieces of broken shells, which were stuck in, and at the junctures covered with resin: the lances that are thus barbed, are indeed dreadful weapons, for when once they have taken place, they can never be drawn back without tearing away the flesh, or leaving the sharp ragged splinters of the bone or shell which forms the beard, behind them in the wound. These weapons are thrown with great force and dexterity; if intended to wound at a short distance, between ten and twenty yards, simply with the hand, but if at the distance of forty or fifty, with an instrument which we called a throwing stick. This is a plain smooth piece of a hard reddish wood, very highly polished, about two inches broad, half an inch thick, and three feet long, with a small knob, or hook at one end, and a cross piece about three or four inches long at the other: the knob at one end is received in

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a small dent or hollow, which is made for that purpose in the shaft of the lance near the point, but from which it easily slips, upon being impelled, forward: when the lance is laid along upon this machine, and secured in a proper position by the knob, the person that is to throw it holds it over his shoulder, and after shaking it, delivers both the throwing stick and lance with all his force, but the stick being stopped by the cross piece which comes against the shoulder, with a sudden jerk, the lance flies forward with incredible swiftness, and with so good an aim, that at the distance of fifty yards these Indians were more sure of their mark than we could be with a single bullet. Besides these lances, we saw no offensive weapon upon this coast, except when we took our last view of it with our glasses, and then we thought we saw a man with a bow and arrows, in which it is possible we might be mistaken. We saw, however, at Botany Bay, a shield or target, of an oblong shape, about three feet long, and eighteen inches broad, which was made of the bark of a tree: this was fetched out of a hut by one of the men that opposed our landing, who, when he ran away, left it behind him, and upon taking it up, we found that it had been pierced through with a single pointed lance near the center. These shields are certainly in frequent use among the people here, for though this was the only one that we saw in their possession, we frequently found trees from which they appeared manifestly to have been cut, the marks being easily distinguished from those that were made by cutting buckets: sometimes also we found the shields cut out, but not yet taken off from the tree, the edges of the bark only being a little raised by wedges, so that these people appear to have discovered that the bark of a tree becomes thicker and stronger by being suffered to remain upon the trunk after it has been cut round.

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The canoes of New Holland are as mean and rude as the houses. Those on the southern part of the coast are nothing more than a piece of bark, about twelve feet long, tied together at the ends, and kept open in the middle by small bows of wood: yet in a vessel of this construction we once saw three people. In shallow water they are set forward by a pole, and in deeper by paddles, about eighteen inches long, one of which the boatman holds in each hand; mean as they are, they have many conveniences, they draw but little water, and they are very light, so that they go upon mud banks to pick up shell fish, the most important use to which they can be applied, better perhaps than vessels of any other construction. We observed, that in the middle of these canoes there was a heap of sea-weed, and upon that a small fire; probably that the fish may be broiled and eaten the moment it is caught.

The canoes that we saw when we advanced farther to the northward, are not made of bark, but of the trunk of a tree hollowed, perhaps by fire. They are about fourteen feet long, and, being very narrow, are fitted with an outrigger to prevent their oversetting. These are worked with paddles, that are so large as to require both hands to manage one of them: the outside is wholly unmarked by any tool, but at each end the wood is left longer at the top than at the bottom, so that there is a projection beyond the hollow part resembling the end of a plank; the sides are tolerably thin, but how the tree is felled and fashioned, we had no opportunity to learn. The only tools that we saw among them are an adze, wretchedly made of stone, some small pieces of the same substance in form of a wedge, a wooden mallet, and some shells and fragments of coral. For polishing their throwing sticks, and the points of their lances, they use the leaves of a kind of wild fig-tree, which bites upon wood al-

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most as keenly as the shave-grafs of Europe, which is used by our joiners: with fuch tools, the making even fuch a canoe as I have defcribed, muft be a moft difficult and tedious labour: to thofe who have been accuftomed to the ufe of metal, it appears altogether impracticable; but there are few difficulties that will not yield to patient perfeverance, and he who does all he can, will certainly produce effects that greatly exceed his apparent power.

The utmoft freight of thefe canoes is four people, and if more at any time wanted to come over the river, one of thofe who came firft was obliged to go back for the reft: from this circumftance, we conjectured that the boat we faw, when we were lying in Endeavour River, was the only one in the neighbourhood: we have however fome reafon to believe that the bark canoes are alfo ufed where the wooden ones are conftituted, for upon one of the fmall iflands where the natives had been fifhing for turtle, we found one of the little paddles which had belonged to fuch a boat, and would have been ufelefs on board any other.

By what means the inhabitants of this country are reduced to fuch a number as it can fubfift, is not perhaps very eafy to guefs; whether, like the inhabitants of New Zealand, they are deftroyed by the hands of each other in contefts for food; whether they are fwep off by accidental famine, or whether there is any caufe which prevents the increafe of the fpecies, muft be left for future adventurers to determine. That they have wars, appears by their weapons; for fup-
pofing the lances to ferve merely for the ftriking of fifh, the fhield could be intended for nothing but a defence againft men; the only mark of hoftility, however, which we faw among them, was the perforation of the fhield by a fpear which has been juft mentioned, for none of them appeared to have been wounded by an enemy. Neither can we determine
whether

whether they are pusillanimous or brave; the resolution with which two of them attempted to prevent our landing, when we had two boats full of men, in Botany Bay, even after one of them was wounded with small shot, gave us reason to conclude that they were not only naturally courageous, but that they had acquired a familiarity with the dangers of hostility, and were, by habit as well as nature, a daring and warlike people; but their precipitate flight from every other place that we approached, without even a menace, while they were out of our reach, was an indication of uncommon tameness and timidity, such as those who had only been occasionally warriors must be supposed to have shaken off, whatever might have been their natural disposition. I have faithfully related facts, the reader must judge of the people for himself.

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From the account that has been given of our commerce with them, it cannot be supposed that we should know much of their language; yet as this is an object of great curiosity, especially to the learned, and of great importance in their researches into the origin of the various nations that have been discovered, we took some pains to bring away such a specimen of it as might, in a certain degree, answer the purpose, and I shall now give an account how it was procured. If we wanted to know the name of a stone, we took a stone up into our hands, and as well as we could, intimated by signs that we wished they should name it: the word that they pronounced upon the occasion, we immediately wrote down. This method, though it was the best we could contrive, might certainly lead us into many mistakes; for if an Indian was to take up a stone, and ask us the name of it, we might answer a pebble or a flint; so when we took up a stone, and asked an Indian the name of it, he might pronounce a word that distinguished the species and not the
genus,

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genus, or that, instead of signifying stone simply, might signify a rough stone, or a smooth stone; however, as much as possible to avoid mistakes of this kind, several of us contrived, at different times, to get from them as many words as we could, and having noted them down, compared our lists: those which were the same in all, and which, according to every one's account, signified the same thing, we ventured to record, with a very few others, which, from the simplicity of the subject, and the ease of expressing our question with plainness and precision by a sign, have acquired equal authority.

English.	New Holland.	English.	New Holland.
<i>The head,</i>	Wageegee.	<i>Nails,</i>	Kulke.
<i>Hair,</i>	Morye.	<i>Sun,</i>	Gallan.
<i>Eyes,</i>	Meul.	<i>Fire,</i>	Meanang.
<i>Ears,</i>	Melea.	<i>A stone,</i>	Walba.
<i>Lips,</i>	Yembe.	<i>Sand,</i>	Yowall.
<i>Nose,</i>	Bonjoo.	<i>A rope,</i>	Gurka.
<i>Tongue,</i>	Unjar.	<i>A man,</i>	Bama.
<i>Beard,</i>	Wallar.	<i>A male turtle,</i>	Poinga.
<i>Neck,</i>	Doomboo.	<i>A female,</i>	Mameingo.
<i>Nipples,</i>	Cayo.	<i>A canoe,</i>	Marigan.
<i>Hands,</i>	Marigal.	<i>To paddle,</i>	Pelenyo.
<i>Thighs,</i>	Coman.	<i>Sit down,</i>	Takai.
<i>Navel,</i>	Toolpoor.	<i>Smooth,</i>	Mier Carrar.
<i>Knees,</i>	Pongo.	<i>A dog,</i>	Cotta, or Kota.
<i>Feet,</i>	Edamal.	<i>A loriquet,</i>	Perpere, or pier-pier.
<i>Heel.</i>	Kniorror.	<i>Blood,</i>	Garmbe.
<i>Cockatoo,</i>	Wanda.	<i>Wood,</i>	Yocou.
<i>The sole of</i>	} Chumal.	<i>The bone in</i>	} Tapool.
<i>the foot,</i>		<i>the nose,</i>	
<i>Ankle,</i>	Chongurn.	<i>A bag,</i>	Charngala.

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English.	New Holland.	English.	New Holland.
<i>Arms,</i>	Aco; or Acol.	<i>A great cockle,</i>	Moingo.
<i>Thumb,</i>	Eboorbalga.	<i>Cocos, yams,</i>	Maracotu.
<i>The fore,</i>	} Egalbaiga.	[<i>Expressions, as we supposed, of admiration, which they continually used when they were in company with us.</i>	
<i>middle, and</i>			
<i>ring fingers,</i>			
<i>The little</i>	} Nakil, or Eboor-	Cherr,	
<i>finger,</i>		Cherco,	
<i>The sky,</i>	Kere, or Kearre.	Yarcaw,	
<i>A father,</i>	Dunjo.	Tut, tut,	
<i>A son,</i>	Jumurre.	tut, tut,	

I shall now quit this country, with a few observations relative to the currents and tides upon the coast. From latitude 32° , and somewhat higher, down to Sandy Cape, in latitude $24^{\circ} 46'$, we constantly found a current setting to the southward, at the rate of about ten or fifteen miles a day, being more or less, according to our distance from the land, for it always ran with more force in shore than in the offing; but I could never satisfy myself whether the flood-tide came from the southward, the eastward, or the northward: I inclined to the opinion that it came from the south-east, but the first time we anchored off the coast, which was in latitude $24^{\circ} 30'$, about ten leagues to the south east of Bustard Bay, I found it come from the north west; on the contrary, thirty leagues farther to the north west, on the south side of Keppel Bay, I found that it came from the east, and at the northern part of that Bay it came from the northward, but with a much slower motion than it had come from the east: on the east side of the Bay of Inlets, it set strongly to the westward, as far as the opening of Broad Sound; but on the north side of that Sound, it came with a very slow motion from the north west; and when we lay at anchor before Repulse Bay,

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it came from the northward: to account for its course in all this variety of directions, we need only admit that the flood-tide comes from the east or south east. It is well known, that where there are deep inlets, and large creeks into low lands, running up from the sea, and not occasioned by rivers of fresh water, there will always be a great indraught of the flood-tide, the direction of which will be determined by the position or direction of the coast which forms the entrance of such inlet, whatever be its course at sea; and where the tides are weak, which upon this coast is generally the case, a large inlet will, if I may be allowed the expression, attract the flood-tide for many leagues.

A view of the chart will at once illustrate this position. To the northward of Whitfunday's Passage there is no large inlet, consequently the flood sets to the northward, or north westward, according to the direction of the coast, and the ebb to the south, or south eastward, at least such is their course at a little distance from the land, for very near it they will be influenced by small inlets. I also observed, that we had only one high tide in twenty-four hours, which happened in the night. The difference between the perpendicular rise of the water in the day and the night, when there is a spring-tide, is no less than three feet, which, where the tides are so inconsiderable as they are here, is a great proportion of the whole difference between high and low water. This irregularity of the tides, which is worthy of notice, we did not discover till we were run ashore, and perhaps farther to the northward it is still greater: after we got within the reef the second time, we found the tides more considerable than we had ever done before, except in the Bay of Inlets, and possibly this may be owing to the water being more confined between the shoals; here also the flood sets to the

the north west, and continues in the same direction to the extremity of New Wales, from whence its direction is west and south west into the Indian sea,

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C H A P. IX.

The Passage from New South Wales to New Guinea, with an Account of what happened upon landing there.

IN the afternoon of Thursday August the 23d, after leaving Booby Island, we steered W. N. W. with light airs from the S. S. W. till five o'clock, when it fell calm, and the tide of ebb soon after setting to the N. E. we came to an anchor in eight fathom water, with a soft sandy bottom. Booby Island bore S. 50 E. distant five miles, and the Prince of Wales's Isles extended from N. E. by N. to S. 55 E.; between these there appeared to be a clear open passage, extending from N. 46 E. to E. by N. Thursday 23.

At half an hour after five, in the morning of the 24th, as we were purchasing the anchor, the cable parted at about eight or ten fathom from the ring: the ship then began to drive, but I immediately dropped another anchor, which brought her up before she got more than a cable's length from the buoy; the boats were then sent to sweep for the anchor, but could not succeed. At noon, our latitude, by observation, was $10^{\circ} 30' S.$ As I was resolved not to leave the anchor behind, while there remained a possibility of recovering it, I sent the boats again after dinner, with a small line, to discover where it lay; this being happily effected, we swept for it with a hawser, and by the same hawser hove the ship up to it: we proceeded to weigh it, but Friday 24.

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Friday 24.

just as we were about to ship it, the hawser slipped, and we had all our labour to repeat: by this time it was dark, and we were obliged to suspend our operations till the morning.

Saturday 25.

As soon as it was light, we swepted it again, and heaved it to the bows: by eight o'clock, we weighed the other anchor, got under sail, and, with a fine breeze at E. N. E. stood to the north west. At noon, our latitude, by observation, was $10^{\circ} 18'$ S. longitude $219^{\circ} 39'$ W. At this time, we had no land in sight, but about two miles to the southward of us lay a large shoal, upon which the sea broke with great violence, and part of which, I believe, is dry at low water. It extends N. W. and S. E. and is about five leagues in circuit. Our depth of water, from the time we weighed till now, was nine fathom, but it soon shallowed to seven fathom; and at half an hour after one, having run eleven miles between noon and that time, the boat which was a-head made the signal for shoal water; we immediately let go an anchor, and brought the ship up with all the sails standing, for the boat having just been relieved, was at but a little distance: upon looking out from the ship, we saw shoal water almost all round us, both wind and tide at the same time setting upon it. The ship was in six fathom, but upon sounding round her, at the distance of half a cable's length, we found scarcely two. This shoal reached from the east, round by the north and west, as far as the south west, so that there was no way for us to get clear but that which we came. This was another hair's-breadth escape, for it was near high water, and there run a short cockling sea, which must very soon have bulged the ship if she had struck; and if her direction had been half a cable's length more either to the right or left, she must have struck before the signal for the shoal was made. The shoals which, like these, lie a fathom or two under water, are the most dangerous of any, for they do not

not discover themselves till the vessel is just upon them, and then indeed the water looks brown, as if it reflected a dark cloud. Between three and four o'clock the tide of ebb began to make, and I sent the Master to sound to the southward and south westward, and in the mean time, as the ship tended, I weighed anchor, and with a little sail stood first to the southward, and afterwards edging away to the westward, got once more out of danger. At sunset, we anchored in ten fathom, with a sandy bottom, having a fresh gale at E. S. E.

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Saturday 25.

At six in the morning, we weighed again and stood west, having, as usual, first sent a boat ahead to sound. I had intended to steer N. W. till I had made the south coast of New Guinea, designing, if possible, to touch upon it; but upon meeting with these shoals, I altered my course, in hopes of finding a clearer channel, and deeper water. In this I succeeded, for by noon our depth of water was gradually increased to seventeen fathom. Our latitude was now by observation $10^{\circ} 10' S.$; and our longitude $220^{\circ} 12' W.$ No land was in sight. We continued to steer west till sunset, our depth of water being from twenty-seven to twenty-three fathom: we then shortened sail, and kept upon a wind all night; four hours on one tack, and four on another. At day-light, we made all the sail we could, and steered W. N. W. till eight o'clock, and then N. W. At noon, our latitude by observation was $9^{\circ} 56' S.$; longitude $221^{\circ} W.$; variation $2^{\circ} 30' E.$ We continued our N. W. course till sunset, when we again shortened sail, and hauled close upon a wind to the northward: our depth of water was twenty-one fathom. At eight, we tacked and stood to the southward till twelve; then stood to the northward with little sail till day-light: our soundings were from twenty-five to seventeen fathom, the water growing gradually shallow as we stood to the northward.

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Monday 27.

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ward. At this time we made sail and stood to the north, in order to make the land of New Guinea: from the time of our making sail till noon, the depth of water gradually decreased from seventeen to twelve fathom, with a stoney and shelly bottom. Our latitude by observation was now $8^{\circ} 52' S.$ which is in the same parallel as that in which the southern parts of New Guinea are laid down in the charts; but there are only two points so far to the south, and I reckoned that we were a degree to the westward of them both, and therefore did not see the land, which trends more to the northward. We found the sea here to be in many parts covered with a brown scum, such as sailors generally call spawn. When I first saw it, I was alarmed, fearing that we were among shoals; but upon sounding, we found the same depth of water as in other places. This scum was examined both by Mr. Banks and Dr. Solander, but they could not determine what it was: it was formed of innumerable small particles, not more than half a line in length, each of which in the microscope appeared to consist of thirty or forty tubes; and each tube was divided through its whole length by small partitions into many cells, like the tubes of the conserva: they were supposed to belong to the vegetable kingdom, because upon burning them they produced no smell like that of an animal substance. The same appearance had been observed upon the coast of Brazil and New Holland, but never at any considerable distance from the shore. In the evening a small bird hovered about the ship, and at night, settling among the rigging, was taken. It proved to be exactly the same bird which Dampier has described, and of which he has given a rude figure, by the name of a Noddy from New Holland. [See his Voyages, vol. iii. p. 98. Tab. of Birds, Fig. 5.]

We

We continued standing to the northward with a fresh gale at E. by E. and S. E. till six in the evening, having very irregular soundings, the depth changing at once from twenty-four fathom to seven. At four, we had seen the land from the mast-head, bearing N. W. by N.; it appeared to be very low, and to stretch from W. N. W. to N. N. E. distant four or five leagues. We now hauled close upon a wind till seven, then tacked and stood to the southward till twelve, at which time we wore and stood to the northward till four in the morning, then laid the head of the vessel off till day-light, when we again saw the land, and stood in N. N. W. directly for it, with a fresh gale at E. by S. Our soundings during the night were very irregular from seven to five fathom, suddenly changing from deep to shallow, and from shallow to deep, without in the least corresponding with our distance from the land. At half an hour after six in the morning a small low island, which lay at the distance of about a league from the main, bore N. by W. distant five miles: this island lies in latitude $8^{\circ} 13' S.$, longitude $221^{\circ} 25' W.$; and I find it laid down in the charts by the names of Bartholomew and Whermoyfen. We now steered N. W. by W. W. N. W. W. by N. W. by S. and S. W. by W. as we found the land lie, with from five to nine fathom; and though we reckoned we were not more than four leagues from it, yet it was so low and level that we could but just see it from the deck. It appeared however to be well covered with wood, and among other trees, we thought we could distinguish the cocoa-nut. We saw smoke in several places, and therefore knew there were inhabitants. At noon we were about three leagues from the land; the westermost part of which that was in sight bore S. $79^{\circ} W.$ Our latitude by observation was $8^{\circ} 19' S.$ and longitude $221^{\circ} 44' W.$ The island of St. Bartholomew bore N. $74^{\circ} E.$ distant 20 miles.

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After

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Wednes. 29.

After steering S. W. by W. six miles, we had shoal water on our starboard bow, which I sent the yawl to sound, and at the same time hauled off upon a wind till four o'clock, and though during that time we had run six miles, we had not deepened our water an inch. I then edged away S. W. four miles more; but finding it still shoal water, I brought to and called the boats aboard. At this time, being between three and four leagues from the shore, and the yawl having found only three fathom water in the place to which I had sent her to sound, I hauled off close upon a wind, and weathered the shoal about half a mile.

Between one and two o'clock, we passed a bay or inlet before which lies a small island that seems to shelter it from the southerly winds; but I very much doubt whether there is sufficient depth of water behind it for shipping. I could not attempt to determine the question, because the S. E. trade wind blows right into the bay, and we had not as yet had any breeze from the land.

Thursday 30.

We stretched off to sea till twelve o'clock, when we were about eleven leagues from the land, and had deepened our water to twenty-nine fathom. We now tacked and stood in till five in the morning; when, being in six fathom and an half, we tacked and laid the head of the vessel off till daylight, when we saw the land, bearing N. W. by W. at about the distance of four leagues. We now made sail, and steered first W. S. W. then W. by S.; but coming into five fathom and an half, we hauled off S. W. till we deepened our water to eight fathom, and then kept away W. by S. and W. having nine fathom, and the land just in sight from the deck; we judged it to be about four leagues distant, and it was still very low and woody. Great quantities of the brown scum continued to appear upon the water, and the sailors, having
given

given up the notion of its being spawn, found a new name for it, and called it Sea-saw-duft. At noon, our latitude by observation was $8^{\circ} 30' S.$; our longitude $222^{\circ} 34' W.$; and Saint Bartholomew's isle bore N. $69^{\circ} E.$ distant seventy-four miles.

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Thursday 30.

As all this coast appears to have been very minutely examined by the Dutch, and as our track with the soundings will appear by the chart, it is sufficient to say, that we continued our course to the northward with very shallow water, upon a bank of mud, at such a distance from the shore as that it could scarcely be seen from the ship, till the 3d of September. During this time we made many attempts to get near enough to go on shore, but without success; and having now lost six days of fair wind, at a time when we knew the south east monsoon to be nearly at an end, we began to be impatient of farther delay, and determined to run the ship in as near to the shore as possible, and then land with the pinnace, while she kept plying off and on, to examine the produce of the country, and the disposition of the inhabitants. For the two last days we had early in the morning a light breeze from the shore, which was strongly impregnated with the fragrance of the trees, shrubs, and herbage that covered it, the smell being something like that of Gum Benjamin. On the 3d of September, at day-break, we saw the land extending from N. by E. to S. E. at about four leagues distance, and we then kept standing in for it with a fresh gale at E. S. E. and E. by S. till nine o'clock, when being within about three or four miles of it, and in three fathom water, we brought to. The pinnace being hoisted out, I set off from the ship with the boat's crew, accompanied by Mr. Banks, who also took his servants, and Dr. Solander, being in all twelve persons well armed; we rowed directly

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directly towards the shore, but the water was so shallow that we could not reach it by about two hundred yards: we waded however the rest of the way, having left two of the seamen to take care of the boat. Hitherto we had seen no signs of inhabitants at this place; but as soon as we got ashore we discovered the prints of human feet, which could not long have been impressed upon the sand, as they were below high-water mark: we therefore concluded that the people were at no great distance, and, as a thick wood came down within a hundred yards of the water, we thought it necessary to proceed with caution, lest we should fall into an ambuscade and our retreat to the boat be cut off. We walked along the skirts of the wood, and at the distance of about two hundred yards from the place where we landed, we came to a grove of cocoa-nut trees, which stood upon the banks of a little brook of brackish water. The trees were of a small growth, but well hung with fruit; and near them was a shed or hut, which had been covered with their leaves, though most of them were now fallen off: about the hut lay a great number of the shells of the fruit, some of which appeared to be just fresh from the tree. We looked at the fruit very wishfully, but not thinking it safe to climb, we were obliged to leave it without tasting a single nut. At a little distance from this place we found plantains, and a bread-fruit tree, but it had nothing upon it; and having now advanced about a quarter of a mile from the boat, three Indians rushed out of the wood with a hideous shout, at about the distance of a hundred yards; and as they ran towards us, the foremost threw something out of his hand, which flew on one side of him, and burnt exactly like gunpowder, but made no report: the other two instantly threw their lances at us; and, as no time was now to be lost, we discharged our
3 pieces,

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pieces, which were loaded with small shot. It is probable that they did not feel the shot, for though they halted a moment, they did not retreat; and a third dart was thrown at us. As we thought their farther approach might be prevented with less risk of life, than it would cost to defend ourselves against their attack if they should come nearer, we loaded our pieces with ball, and fired a second time: by this discharge it is probable that some of them were wounded; yet we had the satisfaction to see that they all ran away with great agility. As I was not disposed forcibly to invade this country, either to gratify our appetites or our curiosity, and perceived that nothing was to be done upon friendly terms, we improved this interval, in which the destruction of the natives was no longer necessary to our own defence, and with all expedition returned towards our boat. As we were advancing along the shore, we perceived that the two men on board made signals that more Indians were coming down; and before we got into the water we saw several of them coming round a point at the distance of about five hundred yards: it is probable that they had met with the three who first attacked us; for as soon as they saw us they halted, and seemed to wait till their main body should come up. We entered the water, and waded towards the boat; and they remained at their station, without giving us any interruption. As soon as we were aboard we rowed abreast of them, and their number then appeared to be between sixty and a hundred. We now took a view of them at our leisure; they made much the same appearance as the New Hollanders, being nearly of the same stature, and having their hair short cropped: like them also they were all stark naked, but we thought the colour of their skin was not quite so dark; this however might perhaps be merely the effect of their not being quite so dirty. All this while they were shouting defiance,

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Monday 3.

fiance, and letting off their fires by four or five at a time. What these fires were, or for what purpose intended, we could not imagine: those who discharged them had in their hands a short piece of stick, possibly a hollow cane, which they swung sideways from them, and we immediately saw fire and smoke, exactly resembling those of a musquet, and of no longer duration. This wonderful phenomenon was observed from the ship, and the deception was so great that the people on board thought they had fire-arms; and in the boat, if we had not been so near as that we must have heard the report, we should have thought they had been firing volleys. After we had looked at them attentively some time, without taking any notice of their flashing and vociferation, we fired some musquets over their heads: upon hearing the balls rattle among the trees, they walked leisurely away, and we returned to the ship. Upon examining the weapons they had thrown at us, we found them to be light darts, about four feet long, very ill made, of a reed or bamboo cane, and pointed with hard wood, in which there were many barbs. They were discharged with great force; for though we were at sixty yards distance, they went beyond us, but in what manner we could not exactly see: possibly they might be shot with a bow; but we saw no bows among them when we surveyed them from the boat, and we were in general of opinion that they were thrown with a stick, in the manner practised by the New Hollanders.

This place lies in the latitude of $6^{\circ} 15'$ S. and about sixty-five leagues to the N. E. of Port Saint Augustine, or Walche Caep, and is near what is called in the charts C. de la Colta de St. Bonaventura. The land here, like that in every other part of the coast is very low, but covered with a luxuriance of wood and herbage that can scarcely be conceived. We saw
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the

the cocoa-nut, the bread-fruit, and the plantain tree, all flourishing in a state of the highest perfection, though the cocoa-nuts were green, and the bread-fruit not in season; besides most of the trees, shrubs, and plants that are common to the South Sea islands, New Zealand, and New Holland.

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Monday 3.

Soon after our return to the ship, we hoisted in the boat and made sail to the westward, being resolved to spend no more time upon this coast, to the great satisfaction of a very considerable majority of the ship's company. But I am sorry to say that I was strongly urged by some of the officers to send a party of men ashore, and cut down the cocoa-nut trees for the sake of the fruit. This I peremptorily refused, as equally unjust and cruel. The natives had attacked us merely for landing upon their coast, when we attempted to take nothing away, and it was therefore morally certain that they would have made a vigorous effort to defend their property if it had been invaded, in which case many of them must have fallen a sacrifice to our attempt, and perhaps also some of our own people. I should have regretted the necessity of such a measure, if I had been in want of the necessities of life; and certainly it would have been highly criminal when nothing was to be obtained but two or three hundred of green cocoa-nuts, which would at most have procured us a mere transient gratification. I might indeed have proceeded farther along the coast to the northward and westward, in search of a place where the ship might have lain so near the shore as to cover the people with her guns when they landed; but this would have obviated only part of the mischief, and though it might have secured us, it would probably in the very act have been fatal to the natives. Besides, we had reason to think that before such a

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 Monday 3.

place would have been found; we should have been carried so far to the westward as to have been obliged to go to Batavia, on the north side of Java; which I did not think so safe a passage as to the south of Java, through the Streights of Sunday: the ship also was so leaky that I doubted whether it would not be necessary to heave her down at Batavia, which was another reason for making the best of our way to that place; especially as no discovery could be expected in seas which had already been navigated, and where every coast had been laid down by the Dutch geographers. The Spaniards indeed, as well as the Dutch, seem to have circumnavigated all the islands in New Guinea, as almost every place that is distinguished in the chart has a name in both languages. The charts with which I compared such part of this coast as I visited, are bound up with a French work, intitled, "*Histoire des Navigations aux Terres Australes*," which was published in 1756, and I found them tolerably exact; yet I know not by whom, nor when they were taken: and though New Holland and New Guinea are in them represented as two distinct countries, the very history in which they are bound up, leaves it in doubt. I pretend however to no more merit in this part of the voyage, than to have established the fact beyond all controversy.

As the two countries lie very near each other, and the intermediate space is full of islands, it is reasonable to suppose that they were both peopled from one common stock: yet no intercourse appears to have been kept up between them; for if there had, the cocoa-nuts, bread-fruit, plantains, and other fruits of New Guinea, which are equally necessary for the support of life, would certainly have been transplanted to New Holland, where no traces of them are to be found. The Author of the "*Histoire des Navigations aux Terres Australes*,"

in his account of La Maire's voyage, has given a vocabulary of the language that is spoken in an island near New Britain, and we find, by comparing that vocabulary with the words which we learnt in New Holland, that the languages are not the same. If therefore it should appear, that the languages of New Britain and New Guinea are the same, there will be reason to suppose that New Britain and New Guinea were peopled from a common stock; but, that the inhabitants of New Holland had a different origin, notwithstanding the proximity of the countries.

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Monday 3.

C H A P. X.

*The Passage from New Guinea to the Island of Savu, and the Transactions there.*1770.
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Tuesday 4.

WE made sail, from noon on Monday the 3d to noon on Tuesday the 4th, standing to the westward, and all the time kept in soundings, having from fourteen to thirty fathom; not regular, but sometimes more, sometimes less. At noon on the 4th, we were in fourteen fathom, and latitude $6^{\circ} 44' S.$, longitude $223^{\circ} 51' W.$; our course and distance since the 3d at noon, were S. 76 W. one hundred and twenty miles to the westward. At noon on the 5th of September, we were in latitude $7^{\circ} 25' S.$, longitude $225^{\circ} 41' W.$; having been in soundings the whole time from ten to twenty fathom.

Wednes. 5.

Thursday 6.

At half an hour after one in the morning of the next day, we passed a small island which bore from us N. N. W. distant between three and four miles; and at day-light we discovered another low island, extending from N. N. W. to N. N. E. distant about two or three leagues. Upon this island, which did not appear to be very small, I believe I should have landed to examine its produce, if the wind had not blown too fresh to admit of it. When we passed this island we had only ten fathom water, with a rocky bottom; and therefore I was afraid of running down to leeward, lest I should meet with shoal water and foul ground. These islands have no place in the charts except they are the Arrou islands; and if these,

these, they are laid down much too far from New Guinea. I found the south part of them to lie in latitude $7^{\circ} 6' S.$, longitude $225^{\circ} W.$

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Thursday 6.

We continued to steer W. S. W. at the rate of four miles and an half an hour, till ten o'clock at night, when we had forty-two fathom, at eleven we had thirty-seven, at twelve forty-five, at one in the morning forty-nine, and at three 120, after which we had no ground. At day-light, we made all the sail we could, and at ten o'clock, saw land, extending from N. N. W. to W. by N. distant between five and six leagues: at noon, it bore from N. to W. and at about the same distance: it appeared to be level, and of a moderate height: by our distance from New Guinea, it ought to have been part of the Arrou Islands, but it lies a degree farther to the south than any of these islands are laid down in the charts; and by the latitude should be Timor Laoet: we founded, but had no ground with fifty fathom.

As I was not able to satisfy myself from any chart, what land it was that I saw to leeward, and fearing that it might trend away more southerly, the weather also being so hazy that we could not see far, I steered S. W. and by four had lost sight of the island. I was now sure that no part of it lay to the southward of $8^{\circ} 15' S.$ and continued standing to the S. W. with an easy sail, and a fresh breeze at S. E. by E. and E. S. E.: we founded every hour, but had no bottom with 120 fathom.

At day-break in the morning, we steered W. S. W. and afterwards W. by S. which by noon brought us into the latitude of $9^{\circ} 30' S.$ longitude $229^{\circ} 34' W.$ and by our run from New Guinea, we ought to have been within sight of Weasel Isles, which in the charts are laid down at the distance of twenty or twenty-five leagues from the coast of New Holland;

Friday 7.

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Friday 7.

land; we however saw nothing, and therefore they must have been placed erroneously; nor can this be thought strange, when it is considered that not only these islands, but the coast which bounds this sea, have been discovered and explored by different people, and at different times, and the charts upon which they are delineated, put together by others, perhaps at the distance of more than a century after the discoveries had been made; not to mention that the discoverers themselves had not all the requisites for keeping an accurate journal, of which those of the present age are possessed.

Saturday 8.

Sunday 9.

We continued our course, steering W. till the evening of the 8th, when the variation of the compass, by several azimuths, was 12° W. and by the amplitude 5° W. At noon, on the 9th, our latitude, by observation, was $9^{\circ} 46'$ S., longitude $232^{\circ} 7'$ W. For the last two days we had steered due W. yet, by observation, we made sixteen miles southing, six miles from noon on the 6th to noon on the 7th, and ten miles from noon on the 7th to noon on the 8th, by which it appeared that there was a current setting to the southward. At sunset, we found the variation to be 2° W. and at the same time, saw an appearance of very high land bearing N. W.

Monday 10.

Tuesday 11.

In the morning of the 10th, we saw clearly that what had appeared to be land the night before, was Timor. At noon, our latitude, by observation, was $10^{\circ} 1'$ S. which was fifteen miles to the southward of that given by the log; our longitude, by observation, was $233^{\circ} 27'$ W. We steered N. W. in order to obtain a more distinct view of the land in sight, till four o'clock in the morning of the 11th, when the wind came to the N. W. and W. with which we stood to the southward till nine, when we tacked and stood N. W. having the wind now at W. S. W. At sun-rise, the land had appeared to extend from W. N. W. to N. E. and at noon, we could see it
extend

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Tuesday 11.

extend to the westward as far as W. by S. $\frac{1}{2}$ S. but no farther to the eastward than N. by E. We were now well assured, that as the first land we had seen was Timor, the last island we had passed was Timor Laoet, or Laut. Laoet, is a word in the language of Malaca, signifying Sea, and this island was named by the inhabitants of that country. The south part of it lies in latitude $8^{\circ} 15'$ S. longitude $228^{\circ} 10'$ W. but in the charts the south point is laid down in various latitudes, from $8^{\circ} 30'$ to $9^{\circ} 30'$: it is indeed possible that the land we saw might be some other island, but the presumption to the contrary is very strong, for if Timor Laut had lain where it is placed in the charts, we must have seen it there. We were now in latitude $9^{\circ} 37'$ S.; longitude, by an observation of the sun and moon, $233^{\circ} 54'$ W. we were the day before in $233^{\circ} 27'$; the difference is $27'$, exactly the same that was given by the log: this, however, is a degree of accuracy in observation that is seldom to be expected. In the afternoon, we stood in shore till eight in the evening, when we tacked and stood off, being at the distance of about three leagues from the land, which at sun-set extended from S. W. $\frac{1}{2}$ W. to N. E.: at this time we sounded, and had no ground with 140 fathom. At midnight, having but little wind, we tacked and stood in, and at noon the next day, our latitude, by observation, was $9^{\circ} 36'$ S. This day, we saw smoke on shore in several places, and had seen many fires during the night. The land appeared to be very high, rising in gradual slopes one above another: the hills were in general covered with thick woods, but among them we could distinguish naked spots of a considerable extent, which had the appearance of having been cleared by art. At five o'clock in the afternoon, we were within a mile and a half of the shore, in sixteen fathom water, and abreast of a small inlet into the low land, which lies in latitude $9^{\circ} 34'$ S. and probably is the same that

Wednes. 12.

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Wednes, 12.

Dampier entered with his boat, for it did not seem to have sufficient depth of water for a ship. The land here answered well to the description that he has given of it: close to the beach it was covered with high spiry trees, which he mentions as having the appearance of pines; behind these there seemed to be salt water creeks, and many mangroves, interspersed however with cocoa-nut trees: the flat land at the beach appeared in some places to extend inward two or three miles before the rise of the first hill; in this part, however, we saw no appearance of plantations or houses, but great fertility, and from the number of fires, we judged that the place must be well peopled.

When we had approached within a mile and an half of the shore, we tacked and stood off, and the extremities of the coast then extended from N. E. by E. to W. by S. $\frac{1}{2}$ S. The south westerly extremity was a low point, distant from us about three leagues. While we were standing in for the shore, we foundered several times, but had no ground till we came within about two miles and a half, and then we had five and twenty fathom, with a soft bottom. After we had tacked, we stood off till midnight, with the wind at S.; we then tacked and stood two hours to the westward, when the wind veered to S. W. and W. S. W. and we then stood to the southward again. In the morning, we found the variation to be $1^{\circ} 10'$ W. by the amplitude, and by the azimuth $1^{\circ} 27'$. At noon, our latitude was, by observation, $9^{\circ} 45'$ S. our longitude $234^{\circ} 12'$ W.; we were then about seven leagues distant from the land, which extended from N. 31 E. to W. S. W. $\frac{1}{2}$ W.

Friday 14.

With light land breezes from W. by N. for a few hours in a morning, and sea breezes from S. S. W. and S. we advanced to the westward but slowly. At noon on the 14th, we were between six and seven leagues from the land, which extended

tended from N. by E. to S. 78 W.; we still saw smoke in many places by day, and fire by night, both upon the low land and the mountains beyond it. We continued steering along the shore, till the morning of the 15th, the land still appearing hilly, but not so high as it had been: the hills in general came quite down to the sea, and where they did not, we saw instead of flats and mangrove land, immense groves of cocoa-nut trees, reaching about a mile up from the beach: there the plantations and houses commenced, and appeared to be innumerable. The houses were shaded by groves of the fan palm, or *borassus*, and the plantations, which were inclosed by a fence, reached almost to the tops of the highest hills. We saw however neither people nor cattle, though our glasses were continually employed, at which we were not a little surpris'd.

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Friday 14.
Saturday 15.

We continued our course, with little variation, till nine o'clock in the morning of the 16th, when we saw the small island called ROTTE; and at noon, the island SEMAU, lying off the south end of Timor, bore N. W.

Sunday 16.

Dampier, who has given a large description of the island of Timor, says, that it is seventy leagues long, and sixteen broad, and that it lies nearly N. E. and S. W. I found the east side of it to lie nearest N. E. by E. and S. W. by W. and the south end to lie in latitude $10^{\circ} 23'$ S. longitude $236^{\circ} 5'$ W. We ran about forty-five leagues along the east side, and found the navigation altogether free from danger. The land which is bounded by the sea, except near the south end, is low for two or three miles within the beach, and in general intersected by salt creeks: behind the low land are mountains, which rise one above another to a considerable height. We steered W. N. W. till two in the afternoon, when, being within a small distance of the north end of Rotte, we hauled

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Sunday 16.

up N. N. W. in order to go between it and Semau: after steering three leagues upon this course, we edged away N. W. and W. and by six, we were clear of all the islands. At this time, the south part of Semau, which lies in latitude $10^{\circ} 15'$ S. bore N. E. distant four leagues, and the island of Rotte extended as far to the southward as S. 36° W. The north end of this island, and the south end of Timor, lie N. $\frac{1}{2}$ E. and S. $\frac{1}{2}$ W. and are about three or four leagues distant from each other. At the west end of the passage between Rotte and Semau, are two small islands, one of which lies near the Rotte shore, and the other off the south west point of Semau: there is a good channel between them, about six miles broad, through which we passed. The isle of Rotte has not so lofty and mountainous an appearance as Timor, though it is agreeably diversified by hill and valley: on the north side, there are many sandy beaches, near which grew some trees of the fan palm, but the far greater part was covered with a kind of brushy wood, that was without leaves. The appearance of Semau was nearly the same with that of Timor, but not quite so high. About ten o'clock at night, we observed a phenomenon in the heavens, which in many particulars resembled the aurora borealis, and in others, was very different: it consisted of a dull reddish light, and reached about twenty degrees above the horizon: its extent was very different at different times, but it was never less than eight or ten points of the compass: through, and out of this, passed rays of light of a brighter colour, which vanished, and were renewed nearly in the same time as those of the aurora borealis, but had no degree of the tremulous or vibratory motion which is observed in that phenomenon: the body of it bore S. S. E. from the ship, and it continued, without any diminution of its brightness, till twelve o'clock, when

when we retired to sleep, but how long afterwards, I cannot tell.

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Monday 17.

Being clear of all the islands, which are laid down in the maps we had on board, between Timor and Java, we steered a west course till six o'clock the next morning, when we unexpectedly saw an island bearing W.S.W. and at first I thought we had made a new discovery. We steered directly for it, and by ten o'clock were close in with the north side of it, where we saw houses, cocoa-nut trees, and, to our very agreeable surprise, numerous flocks of sheep. This was a temptation not to be resisted by people in our situation, especially as many of us were in a bad state of health, and many still repining at my not having touched at Timor: it was therefore soon determined to attempt a commerce with people who appeared to be so well able to supply our many necessities, and remove at once the sickness and discontent that had got footing among us. The pinnace was hoisted out, and Mr. Gore, the Second Lieutenant, sent to see if there was any convenient place to land, taking with him some trifles, as presents to the natives, if any of them should appear. While he was gone, we saw from the ship two men on horseback, who seemed to be riding upon the hills for their amusement, and often stopped to look at the ship. By this we knew that the place had been settled by Europeans, and hoped, that the many disagreeable circumstances which always attend the first establishment of commerce with savages, would be avoided. In the mean time, Mr. Gore landed in a small sandy cove near some houses, and was met by eight or ten of the natives, who, as well in their dress as their persons, very much resembled the Malays: they were without arms, except the knives which it is their custom to wear in their girdles, and one of them had a jack ass with him: they courteously invited him ashore, and con-

versed

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Monday 17.

versed with him by signs, but very little of the meaning of either party could be understood by the other. In a short time he returned with this report, and, to our great mortification, added, that there was no anchorage for the ship. I sent him however a second time, with both money and goods, that he might, if possible, purchase some refreshments, at least for the sick; and Dr. Solander went in the boat with him. In the mean time I kept standing on and off with the ship, which at this time was within about a mile of the shore. Before the boat could land, we saw two other horsemen, one of whom was in a complete European dress, consisting of a blue coat, a white waistcoat, and a laced hat: these people, when the boat came to the shore, took little notice of her, but fauntered about, and seemed to look with great curiosity at the ship. We saw however other horsemen, and a great number of persons on foot, gather round our people, and, to our great satisfaction, perceived several cocoa-nuts carried into the boat, from which we concluded that peace and commerce were established between us.

After the boat had been ashore about an hour and a half, she made the signal for having intelligence that there was a bay to leeward, where we might anchor: we stood away directly for it, and the boat following, soon came on board. The Lieutenant told us, that he had seen some of the principal people, who were dressed in fine linen, and had chains of gold round their necks: he said, that he had not been able to trade, because the owner of the cocoa-nuts was absent, but that about two dozen had been sent to the boat as a present, and that some linen had been accepted in return. The people, to give him the information that he wanted, drew a map upon the sand, in which they made a rude representation of a harbour to leeward, and a town near it: they also gave him to understand, that sheep, hogs, fowls,
and

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and fruit might there be procured in great plenty. Some of them frequently pronounced the word Portuguese, and said something of Larntuca, upon the island of Ende: from this circumstance, we conjectured that there were Portuguese somewhere upon the island, and a Portuguese, who was in our boat, attempted to converse with the Indians in that language, but soon found that they knew only a word or two of it by rote: one of them however, when they were giving our people to understand that there was a town near the harbour to which they had directed us, intimated, that as a token of going right, we should see somewhat, which he expressed by crossing his fingers, and the Portuguese instantly conceived that he meant to express a cross. Just as our people were putting off, the horseman in the European dress came up, but the officer not having his commission about him, thought it best to decline a conference.

At seven o'clock in the evening, we came to an anchor in the bay to which we had been directed, at about the distance of a mile from the shore, in thirty-eight fathom water, with a clear sandy bottom. The north point of the bay bore N. 30 E. distant two miles and an half, and the south point, or west end of the island, bore S. 63 W. Just as we got round the north point, and entered the bay, we discovered a large Indian town or village, upon which we stood on, hoisting a jack on the fore top-mast head: soon after, to our great surprise, Dutch colours were hoisted in the town, and three guns fired; we stood on, however, till we had soundings, and then anchored.

As soon as it was light in the morning, we saw the same colours hoisted upon the beach, abreast of the ship; supposing therefore that the Dutch had a settlement here, I sent Lieutenant Gore ashore, to wait upon the Governor, or the
Tuesday 18,
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chief

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chief person residing upon the spot, and acquaint him who we were, and for what purpose we had touched upon the coast. As soon as he came ashore, he was received by a guard of between twenty and thirty Indians, armed with muskets, who conducted him to the town, where the colours had been hoisted the night before, carrying with them those that had been hoisted upon the beach, and marching without any military regularity. As soon as he arrived, he was introduced to the Raja, or King of the island, and by a Portuguese interpreter, told him, that the ship was a man of war belonging to the King of Great Britain, and that she had many sick on board, for whom he wanted to purchase such refreshments as the island afforded. His Majesty replied, that he was willing to supply us with whatever we wanted, but, that being in alliance with the Dutch East India Company, he was not at liberty to trade with any other people, without having first procured their consent, for which, however, he said he would immediately apply to a Dutchman who belonged to the company, and who was the only white man upon the island. To this man, who resided at some distance, a letter was immediately dispatched, acquainting him with our arrival and request: in the mean time, Mr. Gore dispatched a messenger to me, with an account of his situation, and the state of the treaty. In about three hours, the Dutch resident answered the letter that had been sent him, in person: he proved to be a native of Saxony, and his name is Johan Christopher Lange, and the same person whom we had seen on horseback in a European dress: he behaved with great civility to Mr. Gore, and assured him, that we were at liberty to purchase of the natives whatever we pleased. After a short time, he expressed a desire of coming on board, so did the king also, and several of his attendants: Mr. Gore intimated that he was ready to attend them, but
they

they desired that two of our people might be left ashore as hostages, and in this also they were indulged.

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About two o'clock, they all came aboard the ship, and our dinner being ready, they accepted our invitation to partake of it: I expected them immediately to sit down, but the King seemed to hesitate, and at last, with some confusion, said he did not imagine that we, who were white men, would suffer him, who was of a different colour, to sit down in our company; a compliment soon removed his scruples, and we all sat down together with great cheerfulness and cordiality: happily we were at no loss for interpreters, both Dr. Solander and Mr. Sporing understanding Dutch enough to keep up a conversation with Mr. Lange, and several of the seamen were able to converse with such of the natives as spoke Portuguese. Our dinner happened to be mutton, and the King expressed a desire of having an English sheep; we had but one left, however that was presented to him: the facility with which this was procured, encouraged him to ask for an English dog, and Mr. Banks politely gave up his greyhound: Mr. Lange then intimated that a spying-glass would be acceptable, and one was immediately put into his hand. Our guests then told us that the island abounded with buffaloes, sheep, hogs, and fowls, plenty of which should be driven down to the beach the next day, that we might purchase as many of them as we should think fit: this put us all into high spirits, and the liquor circulated rather faster than either the Indians or the Saxon could bear; they intimated their desire to go away, however, before they were quite drunk, and were received upon deck, as they had been when they came aboard, by the marines under arms. The King expressed a curiosity to see them exercise, in which he was gratified, and they fired three rounds: he looked at them with great attention, and was much surprised at their

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regularity and expedition, especially in cocking their pieces; the first time they did it, he struck the side of the ship with a stick that he had in his hand, and cried out with great vehemence, that all the locks made but one click. They were dismissed with many presents, and when they went away saluted with nine guns: Mr. Banks and Dr. Solander went ashore with them; and as soon as they put off they gave us three cheers.

Our Gentlemen, when they came ashore, walked up with them to the town, which consists of many houses, and some of them are large; they are however nothing more than a thatched roof, supported over a boarded floor, by pillars about four feet high. They produced some of their palm-wine, which was the fresh unfermented juice of the tree; it had a sweet, but not a disagreeable taste; and hopes were conceived that it might contribute to recover our sick from the scurvy. Soon after it was dark, Mr. Banks and Dr. Solander returned on board.

Wednes. 19.

In the morning of the 19th, I went ashore with Mr. Banks, and several of the officers and Gentlemen, to return the King's visit; but my chief business was to procure some of the buffaloes, sheep and fowls, which we had been told should be driven down to the beach. We were greatly mortified to find that no steps had been taken to fulfil this promise; however, we proceeded to the house of assembly, which with two or three more had been erected by the Dutch East India company, and are distinguished from the rest by two pieces of wood resembling a pair of cow's horns, one of which is set up at each end of the ridge that terminates the roof; and these were certainly what the Indian intended to represent by crossing his fingers, though our Portuguese, who was a good Catholic, construed the sign into a

cross, which had persuaded us that the settlement belonged to his countrymen. In this place we met Mr. Lange, and the King, whose name was A Madocho Lomi Djara, attended by many of the principal people. We told them that we had in the boat goods of various kinds, which we proposed to barter for such refreshments as they would give us in exchange, and desired leave to bring them on shore; which being granted, they were brought ashore accordingly. We then attempted to settle the price of the buffaloes, sheep, hogs, and other commodities which we proposed to purchase, and for which we were to pay in money; but as soon as this was mentioned Mr. Lange left us, telling us that these preliminaries must be settled with the natives: he said, however, that he had received a letter from the Governor of Concordia in Timor, the purport of which he would communicate to us when he returned.

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As the morning was now far advanced, and we were very unwilling to return on board and eat salt provisions, when so many delicacies surrounded us ashore, we petitioned his Majesty for liberty to purchase a small hog and some rice, and to employ his subjects to dress them for us. He answered very graciously, that if we could eat victuals dressed by his subjects, which he could scarcely suppose, he would do himself the honour of entertaining us. We expressed our gratitude, and immediately sent on board for liquors.

About five o'clock, dinner was ready; it was served in six and thirty dishes, or rather baskets, containing alternately rice and pork; and three bowls of earthen ware, filled with the liquor in which the pork had been boiled: these were ranged upon the floor, and mats laid round them for us to sit upon. We were then conducted by turns to a hole in the floor, near which stood a man with water in a vessel, made

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of the leaves of the fan-palm, who assisted us in washing our hands. When this was done, we placed ourselves round the victuals, and waited for the king. As he did not come, we enquired for him, and were told that the custom of the country did not permit the person who gave the entertainment to sit down with his guests; but that, if we suspected the victuals to be poisoned, he would come and taste it. We immediately declared that we had no such suspicion, and desired that none of the rituals of hospitality might be violated on our account. The prime minister and Mr. Lange were of our party, and we made a most luxurious meal: we thought the pork and rice excellent, and the broth not to be despised; but the spoons, which were made of leaves, were so small that few of us had patience to use them. After dinner, our wine passed briskly about, and we again enquired for our royal host, thinking that though the custom of his country would not allow him to eat with us, he might at least share in the jollity of our bottle; but he again excused himself, saying, that the master of a feast should never be drunk, which there was no certain way to avoid but by not tasting the liquor. We did not however drink our wine where we had eaten our victuals; but as soon as we had dined made room for the seamen and servants, who immediately took our places: they could not dispatch all that we had left, but the women who came to clear away the bowls and baskets, obliged them to carry away with them what they had not eaten. As wine generally warms and opens the heart, we took an opportunity, when we thought its influence began to be felt, to revive the subject of the buffaloes and sheep, of which we had not in all this time heard a syllable, though they were to have been brought down early in the morning. But our Saxon Dutchman, with great phlegm, began to communicate to us the contents of the letter which he pretended to have

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have received from the Governor of Concordia. He said, that after acquainting him that a vessel had steered from thence towards the island where we were now ashore, it required him, if such ship should apply for provisions in distress, to relieve her; but not to suffer her to stay longer than was absolutely necessary, nor to make any large presents to the inferior people, or to leave any with those of superior rank to be afterwards distributed among them: but he was graciously pleased to add, that we were at liberty to give beads and other trifles in exchange for petty civilities, and palm-wine.

It was the general opinion that this letter was a fiction; that the prohibitory orders were feigned with a view to get money from us for breaking them; and that by precluding our liberality to the natives, this man hoped more easily to turn it into another channel.

In the evening, we received intelligence from our trading-place that no buffaloes or hogs had been brought down, and only a few sheep, which had been taken away before our people, who had sent for money, could procure it. Some fowls however had been bought, and a large quantity of a kind of syrup made of the juice of the palm tree, which, though infinitely superior to molasses or treacle, sold at a very low price. We complained of our disappointment to Mr. Lange, who had now another subterfuge; he said, that if we had gone down to the beach ourselves, we might have purchased what we pleased; but that the natives were afraid to take money of our people, lest it should be counterfeit. We could not but feel some indignation against a man who had concealed this, being true; or alleged it, being false. I started up, however, and went immediately to the beach, but no cattle or sheep were to be seen, nor were any at hand

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to be produced. While I was gone, Lange, who knew well enough that I should succeed no better than my people, told Mr. Banks that the natives were displeased at our not having offered them gold for their stock; and that if gold was not offered, nothing would be bought. Mr. Banks did not think it worth his while to reply, but soon after rose up, and we all returned on board, very much dissatisfied with the issue of our negotiations. During the course of the day, the King had promised that some cattle and sheep should be brought down in the morning, and had given a reason for our disappointment somewhat more plausible; he said that the buffaloes were far up the country, and that there had not been time to bring them down to the beach.

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The next morning we went ashore again: Dr. Solander went up to the town to speak to Lange, and I remained upon the beach, to see what could be done in the purchase of provisions. I found here an old Indian, who, as he appeared to have some authority, we had among ourselves called the Prime Minister; to engage this man in our interest I presented him with a spying-glass, but I saw nothing at market except one small buffalo. I enquired the price of it, and was told five guineas: this was twice as much as it was worth; however, I offered three, which I could perceive the man who treated with me thought a good price; but he said that he must acquaint the King with what I had offered before he could take it. A messenger was immediately dispatched to his Majesty, who soon returned, and said, that the buffalo would not be sold for any thing less than five guineas. This price I absolutely refused to give; and another messenger was sent away with an account of my refusal: this messenger was longer absent than the other, and while I was waiting for his return I saw, to my great astonishment, Dr.

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Solander coming from the town, followed by above a hundred men, some armed with musquets and some with lances. When I enquired the meaning of this hostile appearance, the Doctor told me, that Mr. Lange had interpreted to him a message from the King, purporting that the people would not trade with us, because we had refused to give them more than half the value of what they had to sell; and that we should not be permitted to trade upon any terms longer than this day. Besides the officers who commanded the party, there came with it a man who was born at Timor, of Portuguese parents, and who, as we afterwards discovered, was a kind of colleague to the Dutch factor; by this man what they pretended to be the King's order was delivered to me, of the same purport with that which Dr. Solander had received from Lange. We were all clearly of opinion that this was a mere artifice of the factors to extort money from us, for which we had been prepared by the account of a letter from Concordia; and while we were hesitating what step to take, the Portuguese, that he might the sooner accomplish his purpose, began to drive away the people who had brought down poultry and syrup, and others that were now coming in with buffaloes and sheep. At this time, I glanced my eye upon the old man whom I had complimented in the morning with the spying glass, and I thought, by his looks, that he did not heartily approve of what was doing; I therefore took him by the hand, and presented him with an old broad sword. This instantly turned the scale in our favour; he received the sword with a transport of joy, and flourishing it over the busy Portuguese, who crouched like a fox to a lion, he made him, and the officer who commanded the party, sit down upon the ground behind him: the people, who, whatever were the crafty pretences of these iniquitous factors for a Dutch company, were.

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were eager to supply us with whatever we wanted, and seemed also to be more desirous of goods than money, instantly improved the advantage that had been procured them, and the market was stocked almost in an instant. To establish a trade for buffaloes, however, which I most wanted, I found it necessary to give ten guineas for two, one of which weighed no more than a hundred and sixty pounds; but I bought seven more much cheaper, and might afterwards have purchased as many as I pleased almost upon my own terms, for they were now driven down to the water-side in herds. In the first two that I bought so dear, Lange had certainly a share, and it was in hopes to obtain part of the price of others, that he had pretended we must pay for them in gold. The natives however sold what they afterwards brought down much to their satisfaction, without paying part of the price to him as a reward for exacting money from us. Most of the buffaloes that we bought, after our friend, the Prime Minister, had procured us a fair market, were sold for a musquet apiece, and at this price we might have bought as many as would have freighted our ship.

The refreshments which we procured here, consisted of nine buffaloes, six sheep, three hogs, thirty dozen of fowls, a few limes, and some cocoa-nuts; many dozen of eggs, half of which however proved to be rotten; a little garlic, and several hundred gallons of palm-syrup.

C H A P. XI.

A particular Description of the Island of Savu, its Produce and Inhabitants, with a Specimen of their Language.

THIS island is called by the natives SAVU; the middle of it lies in about the latitude $10^{\circ} 35'$ S., longitude $237^{\circ} 30'$ W.; and has in general been so little known that I never saw a map or chart in which it is clearly or accurately laid down. I have seen a very old one, in which it is called Sou, and confounded with Sandel Bosch. Rumphius mentions an island by the name of Saow; and he also says that it is the same which the Dutch call Sandel Bosch: but neither is this island, nor Timor, nor Rotte, nor indeed any one of the islands that we have seen in these seas, placed within a reasonable distance of its true situation. It is about eight leagues long from east to west; but what is its breadth, I do not know, as I saw only the north side. The harbour in which we lay is called Seba, from the district in which it lies: it is on the north west side of the island, and well sheltered from the south west trade wind, but it lies open to the north west. We were told, that there were two other bays where ships might anchor; that the best, called Timo, was on the south west side of the south east point: of the third we learnt neither the name nor situation. The sea-coast, in general, is low; but in the middle of the island there are hills of a considerable height. We were upon the coast at the latter end of the dry season, when there had been no rain for seven months; and we were told that when the dry season conti-

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nues so long, there is no running stream of fresh water upon the whole island, but only small springs, which are at a considerable distance from the sea-side: yet nothing can be imagined so beautiful as the prospect of the country from the ship. The level ground next to the sea-side was covered with cocoa-nut trees, and a kind of palm called *Areca*s; and beyond them the hills, which rose in a gentle and regular ascent, were richly clothed, quite to the summit, with plantations of the fan-palm, forming an almost impenetrable grove. How much even this prospect must be improved, when every foot of ground between the trees is covered with verdure, by maize, and millet and indico, can scarcely be conceived but by a powerful imagination, not unacquainted with the stateliness and beauty of the trees that adorn this part of the earth. The dry season commences in March or April, and ends in October or November.

The principal trees of this island, are the fan-palm, the cocoa-nut, tamarind, limes, oranges, and mangoes; the other vegetable productions are maize, Guinea corn, rice, millet, callevances, and water-melons. We saw also one sugar-cane, and a few kinds of European garden-stuff; particularly cellery, marjoram, fennel, and garlic. For the supply of luxury, it has betele, areca, tobacco, cotton, indico, and a small quantity of cinnamon, which seems to be planted here only for curiosity; and indeed we doubted whether it was the genuine plant, knowing that the Dutch are very careful not to trust the spices out of their proper islands. There are however several kinds of fruit, besides those which have been already mentioned; particularly the sweet sop, which is well known to the West Indians, and a small oval fruit, called the *Blimbi*, both of which grow upon trees. The blimbi is about three or four inches long, and
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in the middle about as thick as a man's finger, tapering towards each end: it is covered with a very thin skin of a light green colour, and in the inside are a few seeds disposed in the form of a star: its flavour is a light, clean, pleasant acid, but it cannot be eaten raw; it is said to be excellent as a pickle; and stewed, it made a most agreeable four sauce to our boiled dishes.

The tame animals are buffaloes, sheep, goats, hogs, fowls, pigeons, horses, asses, dogs and cats; and of all these there is great plenty. The buffaloes differ very considerably from the horned cattle of Europe in several particulars; their ears are much larger, their skins are almost without hair, their horns are curved towards each other, but together bend directly backwards, and they have no dewlaps. We saw several that were as big as a well grown European ox, and there must be some much larger; for Mr. Banks saw a pair of horns which measured from tip to tip three feet nine inches and an half, across their widest diameter four feet one inch and an half, and in the whole sweep of their semicircle in front seven feet six inches and a half. It must however be observed, that a buffalo here of any given size, does not weigh above half as much as an ox of the same size in England: those that we guessed to weigh four hundred weight did not weigh more than two hundred and fifty; the reason is, that so late in the dry season the bones are very thinly covered with flesh; there is not an ounce of fat in a whole carcass, and the flanks are literally nothing but skin and bone: the flesh however is well tasted and juicy, and I suppose better than the flesh of an English ox would be if he was to starve in this sun-burnt country.

The horses are from eleven to twelve hands high, but though they are small, they are spirited and nimble, especially

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cially in pacing, which is their common step: the inhabitants generally ride them without a saddle, and with no better bridle than a halter. The sheep are of the kind which in England are called Bengal sheep, and differ from ours in many particulars. They are covered with hair instead of wool, their ears are very large, and hang down under their horns, and their noses are arched; they are thought to have a general resemblance to a goat, and for that reason are frequently called *cabritos*: their flesh we thought the worst mutton we had ever eaten, being as lean as that of the buffalo's, and without flavour. The hogs, however, were some of the fattest we had ever seen, though, as we were told, their principal food is the outside husks of rice, and the palm syrup dissolved in water. The fowls are chiefly of the game breed, and large, but the eggs are remarkably small.

Of the fish which the sea produces here, we know but little: turtles are sometimes found upon the coast, and are by these people, as well as all others, considered as a dainty.

The people are rather under, than over the middling size; the women especially are remarkably short and squat built: their complexion is a dark brown, and their hair universally black and lank. We saw no difference in the colour of rich and poor, though in the South Sea islands those that were exposed to the weather were almost as brown as the New Hollanders, and the better sort nearly as fair as the natives of Europe. The men are in general well-made, vigorous, and active, and have a greater variety in the make and disposition of their features than usual; the countenances of the women, on the contrary, are all alike.

The men fasten their hair up to the top of their heads with a comb, the women tie it behind in a club, which is
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very far from becoming. Both sexes eradicate the hair from under the arm, and the men do the same by their beards, for which purpose, the better sort always carry a pair of silver pincers hanging by a string round their necks; some however suffer a very little hair to remain upon their upper lips, but this is always kept short.

The dress of both sexes consists of cotton cloth, which being died blue in the yarn, and not uniformly of the same shade, is in clouds or waves of that colour, and even in our eye had not an inelegant appearance. This cloth they manufacture themselves, and two pieces, each about two yards long, and a yard and a half wide, make a dress: one of them is worn round the middle, and the other covers the upper part of the body: the lower edge of the piece that goes round the middle, the men draw pretty tight just below the fork, the upper edge of it is left loose, so as to form a kind of hollow belt, which serves them as a pocket to carry their knives, and other little implements which it is convenient to have about them. The other piece of cloth is passed through this girdle behind, and one end of it being brought over the left shoulder, and the other over the right, they fall down over the breast, and are tucked into the girdle before, so that by opening or closing the plaits, they can cover more or less of their bodies as they please; the arms, legs, and feet are always naked. The difference between the dress of the two sexes consists principally in the manner of wearing the waist-piece, for the women, instead of drawing the lower edge tight, and leaving the upper edge loose for a pocket, draw the upper edge tight, and let the lower edge fall as low as the knees, so as to form a petticoat; the body-piece, instead of being passed through the girdle, is fastened under the arms, and crosses the breast, with the utmost decency. I have already observed, that the men fasten the
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hair upon the top of the head, and the women tie it in a club behind, but there is another difference in the head-dress, by which the sexes are distinguished: the women wear nothing as a succedaneum for a cap, but the men constantly wrap something round their heads in the manner of a fillet; it is small, but generally of the finest materials that can be procured: we saw some who applied silk handkerchiefs to this purpose, and others that wore fine cotton, or muslin, in the manner of a small turban.

These people bore their testimony that the love of finery is a universal passion, for their ornaments were very numerous. Some of the better sort wore chains of gold round their necks, but they were made of plaited wire, and consequently were light and of little value; others had rings, which were so much worn that they seemed to have descended through many generations; and one person had a silver-headed cane, marked with a kind of cypher, consisting of the Roman letters V, O, C, and therefore probably a present from the Dutch East India Company, whose mark it is: they have also ornaments made of beads, which some wear round their necks as a solitaire, and others, as bracelets, upon their wrists: these are common to both sexes, but the women have besides, strings or girdles of beads, which they wear round their waists, and which serve to keep up their petticoat. Both sexes had their ears bored, nor was there a single exception that fell under our notice, yet we never saw an ornament in any of them; we never indeed saw either man or woman in any thing but what appeared to be their ordinary dress, except the King and his minister, who in general wore a kind of night-gown of coarse chintz, and one of whom once received us in a black robe, which appeared to be made of what is called prince's stuff. We saw some boys, about twelve or fourteen years old, who had spiral circles

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of thick brass wire passed three or four times round their arms, above the elbow, and some men wore rings of ivory, two inches in breadth, and above an inch in thickness, upon the same part of the arm: these, we were told, were the sons of the Rajas, or Chiefs, who wore these cumbersome ornaments as badges of their high birth.

Almost all the men had their names traced upon their arms, in indelible characters of a black colour, and the women had a square ornament of flourished lines, impressed in the same manner, just under the bend of the elbow. We were struck with the similitude between these marks, and those made by tattowing in the South Sea islands, and upon enquiring into its origin, we learnt that it had been practised by the natives long before any Europeans came among them; and that in the neighbouring islands the inhabitants were marked with circles upon their necks and breasts. The universality of this practice, which prevails among savages in all parts of the world, from the remotest limits of North America, to the islands in the South Seas, and which probably differs but little from the method of staining the body that was in use among the ancient inhabitants of Britain, is a curious subject of speculation †.

The houses of Savu are all built upon the same plan, and differ only in size, being large in proportion to the rank and

† In the account which Mr. Boffu has given of some Indians who inhabit the banks of the Akanza, a river of North America, which rises in New Mexico, and falls into the Mississippi, he relates the following incident: "The Akanzas, says he, have adopted me, and as a mark of my privilege, have imprinted the figure of a roe-buck upon my thigh, which was done in this manner: an Indian having burnt some straw, diluted the ashes with water, and with this mixture, drew the figure upon my skin; he then retraced it, by pricking the lines with needles, so as at every puncture just to draw the blood, and the blood mixing with the ashes of the straw, forms a figure which can never be effaced." See Travels through Louisiana, vol. i. p. 107.

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riches of the proprietor. Some are four hundred feet long, and some are not more than twenty: they are all raised upon posts, or piles, about four feet high, one end of which is driven into the ground, and upon the other end is laid a substantial floor of wood, so that there is a vacant space of four feet between the floor of the house and the ground. Upon this floor are placed other posts or pillars, that support a roof of sloping sides, which meet in a ridge at the top, like those of our barns: the eaves of this roof, which is thatched with palm leaves, reach within two feet of the floor, and over-hang it as much: the space within is generally divided lengthwise into three equal parts; the middle part, or center, is inclosed by a partition of four sides, reaching about six feet above the floor, and one or two small rooms are also sometimes taken off from the sides, the rest of the space under the roof is open, so as freely to admit the air and the light: the particular uses of these different apartments, our short stay would not permit us to learn, except that the close room in the center was appropriated to the women.

The food of these people consists of every tame animal in the country, of which the hog holds the first place in their estimation, and the horse the second; next to the horse is the buffalo, next to the buffalo their poultry, and they prefer dogs and cats to sheep and goats. They are not fond of fish, and, I believe, it is never eaten but by the poor people, nor by them, except when their duty or business requires them to be upon the beach, and then every man is furnished with a light casting net, which is girt round him, and makes part of his dress; and with this he takes any small fish which happen to come in his way.

The æsculent vegetables and fruits have been mentioned already, but the fan-palm requires more particular notice,

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for at certain times it is a succedaneum for all other food both to man and beast. A kind of wine, called toddy, is procured from this tree, by cutting the buds which are to produce flowers, soon after their appearance, and tying under them small baskets, made of the leaves, which are so close as to hold liquids without leaking. The juice which trickles into these vessels, is collected by persons who climb the trees for that purpose, morning and evening, and is the common drink of every individual upon the island; yet a much greater quantity is drawn off than is consumed in this use, and of the surplus they make both a syrup and coarse sugar. The liquor is called *dua*, or *duac*, and both the syrup and sugar, *gula*. The syrup is prepared by boiling the liquor down in pots of earthen ware, till it is sufficiently inspissated; it is not unlike treacle in appearance, but is somewhat thicker, and has a much more agreeable taste: the sugar is of a reddish brown, perhaps the same with the Jugata sugar upon the continent of India, and it was more agreeable to our palates than any cane sugar, unrefined, that we had ever tasted. We were at first afraid that the syrup, of which some of our people eat very great quantities, would have brought on fluxes, but its aperient quality was so very slight, that what effect it produced was rather salutary than hurtful. I have already observed, that it is given with the husks of rice to the hogs, and that they grow enormously fat without taking any other food: we were told also, that this syrup is used to fatten their dogs and their fowls, and that the inhabitants themselves have subsisted upon this alone for several months, when other crops have failed, and animal food has been scarce. The leaves of this tree are also put to various uses, they thatch houses, and make baskets, cups, umbrellas, and tobacco-pipes. The fruit is least esteemed, and as the blossoms are wounded for the tuac or toddy, there

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is not much of it: it is about as big as a large turnip, and covered, like the cocoa-nut, with a fibrous coat, under which are three kernels, that must be eaten before they are ripe, for afterwards they become so hard that they cannot be chewed; in their eatable state they taste not unlike a green cocoa-nut, and, like them, probably they yield a nutriment that is watry and unsubstantial.

The common method of dressing food here is by boiling, and as fire-wood is very scarce, and the inhabitants have no other fuel, they make use of a contrivance to save it, that is not wholly unknown in Europe, but is seldom practised except in camps. They dig a hollow under ground, in a horizontal direction, like a rabbit burrow, about two yards long, and opening into a hole at each end, one of which is large and the other small: by the large hole the fire is put in, and the small one serves for a draught. The earth over this burrow is perforated by circular holes, which communicate with the cavity below; and in these holes are set earthen pots, generally about three to each fire, which are large in the middle, and taper towards the bottom, so that the fire acts upon a large part of their surface. Each of these pots generally contains about eight or ten gallons, and it is surprising to see with how small a quantity of fire they may be kept boiling; a palm leaf, or a dry stalk, thrust in now and then, is sufficient: in this manner they boil all their victuals, and make all their syrup and sugar. It appears by Frazier's account of his voyage to the South Sea, that the Peruvian Indians have a contrivance of the same kind, and perhaps it might be adopted with advantage by the poor people even of this country, where fuel is very dear.

Both sexes are enslaved by the hateful and pernicious habit of chewing beetle and areca, which they contract even while
they

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they are children, and practise incessantly from morning till night. With these they always mix a kind of white lime, made of coral stone and shells, and frequently a small quantity of tobacco, so that their mouths are disgusting in the highest degree both to the smell and the sight: the tobacco taints their breath, and the beetle and lime make the teeth not only as black as charcoal, but as rotten too. I have seen men between twenty and thirty, whose fore teeth have been consumed almost down to the gums, though no two of them were exactly of the same length or thickness, but irregularly corroded like iron by rust. This loss of teeth is, I think, by all who have written upon the subject, imputed to the tough and stringy coat of the areca nut; but I impute it wholly to the lime: they are not loosened, or broken, or forced out, as might be expected if they were injured by the continual chewing of hard and rough substances, but they are gradually wasted like metals that are exposed to the action of powerful acids; the stumps always adhering firmly to the socket in the jaw, when there is no part of the tooth above the gums: and possibly those who suppose that sugar has a bad effect upon the teeth of Europeans, may not be mistaken, for it is well known that refined loaf sugar contains a considerable quantity of lime; and he that doubts whether lime will destroy bone of any kind, may easily ascertain the fact by experiment.

If the people here are at any time without this odious mouthful, they are smoking. This operation they perform by rolling up a small quantity of tobacco, and putting it into one end of a tube about six inches long, and as thick as a goose quill, which they make of a palm leaf. As the quantity of tobacco in these pipes is very small, the effect of it is increased, especially among the women, by swallowing the smoke.

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When the natives of this island were first formed into a civil society, is not certainly known, but at present it is divided into five principalities or nigrees: LA AI, SEBA, REGEEUA, TIMO, and MASSARA, each of which is governed by its respective Raja or King. The Raja of Seba, the principality in which we were ashore, seemed to have great authority, without much external parade or show, or much appearance of personal respect. He was about five and thirty years of age, and the fattest man we saw upon the whole island: he appeared to be of a dull phlegmatic disposition, and to be directed almost implicitly by the old man who, upon my presenting him with a sword, had procured us a fair market, in spite of the craft and avarice of the Dutch factors. The name of this person was MANNU DJARME, and it may reasonably be supposed that he was a man of uncommon integrity and abilities, as, notwithstanding his possession of power in the character of a favourite, he was beloved by the whole principality. If any difference arises among the people, it is settled by the Raja and his counsellors, without delay or appeal, and, as we were told, with the most solemn deliberation and impartial justice.

We were informed by Mr. Lange, that the chiefs who had successively presided over the five principalities of this island, had lived for time immemorial in the strictest alliance and most cordial friendship with each other; yet he said the people were of a warlike disposition, and had always courageously defended themselves against foreign invaders. We were told also, that the island was able to raise, upon very short notice, 7300 fighting men, armed with muskets, spears, lances, and targets. Of this force, Laai was said to furnish 2600, Seba 2000, Regeeuā 1500, Timo 800, and Massārā 400. Besides the arms that have been already mentioned, each man is furnished with a large pole-ax, resembling

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bling a wood-bill, except that it has a strait edge, and is much heavier: this, in the hands of people who have courage to come to close quarters with an enemy, must be a dreadful weapon; and we were told that they were so dexterous with their lances, that at the distance of sixty feet they would throw them with such exactness as to pierce a man's heart, and such force as to go quite through his body.

How far this account of the martial prowess of the inhabitants of Savu may be true, we cannot take upon us to determine, but during our stay, we saw no appearance of it. We saw indeed in the town-house, or house of assembly, about one hundred spears and targets, which served to arm the people who were sent down to intimidate us at the trading place; but they seemed to be the refuse of old armories, no two being of the same make or length, for some were six, and some sixteen feet long: we saw no lance among them, and as to the muskets, though they were clean on the outside, they were eaten into holes by the rust within; and the people themselves appeared to be so little acquainted with military discipline, that they marched like a disorderly rabble, every one having, instead of his target, a cock, some tobacco, or other merchandise of the like kind, which he took that opportunity to bring down to sell, and few or none of their cartridge boxes were furnished with either powder or ball, though a piece of paper was thrust into the hole to save appearances. We saw a few swivel guns, and pateraros at the town-house, and a great gun before it; but the swivels and pateraros lay out of their carriages, and the great gun lay upon a heap of stones, almost consumed with rust, with the touch-hole downwards, possibly to conceal its size, which might perhaps be little less than that of the bore.

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We could not discover that among these people there was any rank of distinction between the Raja and the land-owners: the land-owners were respectable in proportion to their possessions; the inferior ranks consist of manufacturers, labouring poor, and slaves. The slaves, like the peasants in some parts of Europe, are connected with the estate, and both descend together: but though the land-owner can sell his slave, he has no other power over his person, not even to correct him, without the privity and approbation of the Raja. Some have five hundred of these slaves, and some not half a dozen: the common price of them is a fat hog. When a great man goes out, he is constantly attended by two or more of them: one of them carries a sword or hanger, the hilt of which is commonly of silver, and adorned with large tassels of horse hair; and another carries a bag which contains betel, areca, lime, and tobacco. In these attendants consists all their magnificence, for the Raja himself has no other mark of distinction.

The chief object of pride among these people, like that of a Welchman, is a long pedigree of respectable ancestors, and indeed a veneration for antiquity seems to be carried farther here than in any other country: even a house that has been well inhabited for many generations, becomes almost sacred, and few articles either of use or luxury bear so high a price as stones, which having been long set upon, are become even and smooth: those who can purchase such stones, or are possessed of them by inheritance, place them round their houses, where they serve as seats for their dependants.

Every Raja sets up in the principal town of his province, or nigree, a large stone, which serves as a memorial of his reign. In the principal town of Seba, where we lay, there are thirteen such stones, besides many fragments of others, which

which had been set up in earlier times, and are now mouldering away: these monuments seem to prove that some kind of civil establishment here is of considerable antiquity. The last thirteen reigns in England make something more than 276 years.

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Many of these stones are so large, that it is difficult to conceive by what means they were brought to their present station, especially as it is the summit of a hill; but the world is full of memorials of human strength, in which the mechanical powers that have been since added by mathematical science, seem to be surpassed; and of such monuments there are not a few among the remains of barbarous antiquity in our own country, besides those upon Salisbury plain.

These stones not only record the reigns of successive princes, but serve for a purpose much more extraordinary, and probably altogether peculiar to this country. When a Raja dies, a general feast is proclaimed throughout his dominions, and all his subjects assemble round these stones; almost every living creature that can be caught is then killed, and the feast lasts for a less or greater number of weeks or months, as the kingdom happens to be more or less furnished with live stock at the time; the stones serve for tables. When this madness is over, a fast must necessarily ensue, and the whole kingdom is obliged to subsist upon syrup and water, if it happens in the dry season, when no vegetables can be procured; till a new stock of animals can be raised from the few that have escaped by chance, or been preserved by policy from the general massacre, or can be procured from the neighbouring kingdoms. Such, however, is the account that we received from Mr. Lange.

We

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We had no opportunity to examine any of their manufactures, except that of their cloth, which they spin, weave, and dye; we did not indeed see them employed, but many of the instruments which they use fell in our way. We saw their machine for clearing cotton of its seeds, which is made upon the same principles as those in Europe, but is so small that it might be taken for a model, or a toy: it consists of two cylinders, like our round rulers, somewhat less than an inch in diameter, one of which, being turned round by a plain winch, turns the other by means of an endless worm; and the whole machine is not more than fourteen inches long, and seven high: that which we saw had been much used, and many pieces of cotton were hanging about it, so that there is no reason to doubt its being a fair specimen of the rest. We also once saw their apparatus for spinning; it consisted of a bobbin, on which was wound a small quantity of thread, and a kind of distaff filled with cotton; we conjectured therefore that they spin by hand, as the women of Europe did before the introduction of wheels; and I am told that they have not yet found their way into some parts of it. Their loom seemed to be in one respect preferable to ours, for the web was not stretched upon a frame, but extended by a piece of wood at each end, round one of which the cloth was rolled, and round the other the threads: the web was about half a yard broad, and the length of the shuttle was equal to the breadth of the web, so that probably their work goes on but slowly. That they dyed this cloth we first guessed from its colour, and from the indigo which we saw in their plantations; and our conjecture was afterwards confirmed by Mr. Lange's account. I have already observed, that it is dyed in the yarn, and we once saw them dying what was said to be girdles for the women, of a dirty red, but with what drug we did not think it worth while to enquire.

The

The religion of these people, according to Mr. Lange's information, is an absurd kind of paganism, every man choosing his own god, and determining for himself how he should be worshipped; so that there are almost as many gods and modes of worship as people. In their morals, however, they are said to be irreproachable, even upon the principles of Christianity: no man is allowed more than one wife; yet an illicit commerce between the sexes is in a manner unknown among them: instances of theft are very rare; and they are so far from revenging a supposed injury by murder, that if any difference arises between them, they will not so much as make it the subject of debate, lest they should be provoked to resentment and ill-will, but immediately and implicitly refer it to the determination of their King.

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They appeared to be a healthy and long-lived people; yet some of them were marked with the small-pox, which Mr. Lange told us had several times made its appearance among them, and was treated with the same precautions as the plague. As soon as a person was seized with the distemper, he was removed to some solitary place, very remote from any habitation, where the disease was left to take its course, and the patient supplied with daily food by reaching it to him at the end of a long pole.

Of their domestic œconomy we could learn but little: in one instance however their delicacy and cleanliness are very remarkable. Many of us were ashore here three successive days, from a very early hour in the morning till it was dark; yet we never saw the least trace of an offering to Cloacina, nor could we so much as guess where they were made. In a country so populous this is very difficult to be accounted

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for, and perhaps there is no other country in the world where the secret is so effectually kept.

The boats in use here are a kind of proa.

This island was settled by the Portuguese almost as soon as they first found their way into this part of the ocean; but they were in a short time supplanted by the Dutch. The Dutch however did not take possession of it, but only sent sloops to trade with the natives, probably for provisions to support the inhabitants of their spice islands, who applying themselves wholly to the cultivation of that important article of trade, and laying out all their ground in plantations, can breed few animals: possibly their supplies by this occasional traffic were precarious; possibly they were jealous of being supplanted in their turn; but however that be, their East India Company, about ten years ago, entered into a treaty with the Rajas, by which the Company stipulated to furnish each of them with a certain quantity of silk, fine linen, cutlery ware, arrack and other articles, every year; and the Rajas engaged that neither they nor their subjects should trade with any person except the company, without having first obtained their consent, and that they would admit a resident on behalf of the Company, to reside upon the island, and see that their part of the treaty was fulfilled: they also engaged to supply annually a certain quantity of rice, maize, and calavances. The maize and calavances are sent to Timor in sloops, which are kept there for that purpose, each of which is navigated by ten Indians; and the rice is fetched away annually by a ship which brings the Company's returns, and anchors alternately in each of the three bays. These returns are delivered to the Rajas in the form of a present, and the cask of arrack they and their principal people

people never cease to drink, as long as a drop of it remains.

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In consequence of this treaty, the Dutch placed three persons upon the island: Mr. Lange, his colleague, the native of Timor, the son of an Indian woman by a Portuguese, and one Frederick Craig, the son of an Indian woman by a Dutchman. Lange visits each of the Rajas once in two months, when he makes the tour of the island, attended by fifty slaves on horseback. He exhorts these Chiefs to plant, if it appears that they have been remiss, and observes where the crops are got in, that he may order sloops to fetch it; so that it passes immediately from the ground to the Dutch storehouses at Timor. In these excursions he always carries with him some bottles of arrack, which he finds of great use in opening the hearts of the Rajas with whom he is to deal.

During the ten years that he had resided upon this island he had never seen a European besides ourselves, except at the arrival of the Dutch ship, which had sailed about two months before we arrived; and he is now to be distinguished from the natives only by his colour and his dress, for he sits upon the ground, chews his betel, and in every respect has adopted their character and manners: he has married an Indian woman of the island of Timor, who keeps his house after the fashion of her country; and he gave that as a reason for not inviting us to visit him, saying, that he could entertain us in no other manner than the Indians had done, and he spoke no language readily but that of the country.

The office of Mr. Frederic Craig is to instruct the youth of the country in reading and writing, and the principles of the Christian religion; the Dutch having printed versions of the New Testament, a catechism, and several other tracts,

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in the language of this and the neighbouring islands. Dr. Solander, who was at his house, saw the books, and the copy-books also, of his scholars, many of whom wrote a very fair hand. He boasted that there were no less than six hundred Christians in the township of Seba; but what the Dutch Christianity of these Indians may be, it is not perhaps very easy to guess, for there is not a church, nor even a priest, in the whole island.

While we were at this place, we made several enquiries concerning the neighbouring islands, and the intelligence which we received, is to the following effect:

A small island to the westward of Savu, the name of which we did not learn, produces nothing of any consequence but areca-nuts, of which the Dutch receive annually the freight of two floops, in return for presents that they make to the islanders.

Timor is the chief, and the Dutch residents on the other islands go thither once a year to pass their accounts. The place is nearly in the same state as in Dampier's time, the Dutch having there a fort and storehouses; and by Lange's account we might there have been supplied with every necessary that we expected to procure at Batavia, salt provisions and arrack not excepted. But the Portuguese are still in possession of several towns on the north side of the island, particularly Laphao and Sefial.

About two years before our arrival, a French ship was wrecked upon the east coast of Timor; and after she had lain some days upon the shoal, a sudden gale broke her up at once, and drowned the Captain, with the greatest part of the crew: those who got ashore, among whom was one of the Lieutenants, made the best of their way to Concordia; they were four days upon the road, where they were obliged

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liged to leave part of their company through fatigue, and the rest, to the number of about eighty, arrived at the town. They were supplied with every necessary, and sent back to the wreck, with proper assistance, for recovering what could be fished up: they fortunately got up all their bullion, which was in chests, and several of their guns, which were very large. They then returned to the town, but their companions who had been left upon the road were missing, having, as it was supposed, been kept among the Indians, either by persuasion or force; for they are very desirous of having Europeans among them, to instruct them in the art of war. After a stay of more than two months at Concordia, their number was diminished nearly one half by sickness, in consequence of the fatigue and hardship which they had suffered by the shipwreck, and the survivors were sent in a small vessel to Europe.

Rotte is in much the same situation as Savu; a Dutch factor resides upon it to manage the natives, and look after its produce, which consists, among other articles, of sugar. Formerly it was made only by bruising the canes, and boiling the juice to a syrup, in the same manner as Toddy; but great improvements have lately been made in preparing this valuable commodity. The three little islands called the Solars are also under the influence of the Dutch settlement at Concordia: they are flat and low, but abound with provisions of every kind, and the middlemost is said to have a good harbour for shipping. Ende, another little island to the westward of the Solars, is still in the hands of the Portuguese, who have a good town and harbour on the north east corner of it called Larntuca: they had formerly an harbour on the south side of it, but that, being much inferior to Larntuca, has for some time been altogether neglected.

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The inhabitants of each of these little islands speak a language peculiar to themselves, and it is an object of Dutch policy to prevent, as much as possible, their learning the language of each other. If they spoke a common language, they would learn, by a mutual intercourse with each other, to plant such things as would be of more value to themselves than their present produce, though of less advantage to the Dutch; but their languages being different, they can communicate no such knowledge to each other, and the Dutch secure to themselves the benefit of supplying their several necessities upon their own terms, which it is reasonable to suppose are not very moderate. It is probably with a view to this advantage that the Dutch never teach their own language to the natives of these islands, and have been at the expence of translating the Testament and catechisms into the different languages of each; for in proportion as Dutch had become the language of their religion, it would have become the common language of them all.

To this account of Savu, I shall only add a small specimen of its language, by which it will appear to have some affinity with that of the South Sea islands, many of the words being exactly the same, and the numbers manifestly derived from the same source.

<i>A man,</i>	Momonne.	<i>The ears,</i>	Wodeceloo.
<i>A woman,</i>	Mobunnee.	<i>The tongue,</i>	Vaio.
<i>The head,</i>	Catoo.	<i>The neck,</i>	Lacoco.
<i>The hair,</i>	Row catoo.	<i>The breasts,</i>	Soofoo.
<i>The eyes,</i>	Matta.	<i>The nipples,</i>	Caboo soofoo.
<i>The eye-lashes,</i>	Rowna matta.	<i>The belly,</i>	Dulloo.
<i>The nose,</i>	Swanga.	<i>The navel,</i>	Affoo.
<i>The cheeks,</i>	Cavaranga.	<i>The thighs,</i>	Tooga.

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<i>The knees,</i>	Rootoo.	<i>The sun,</i>	Lodo.
<i>The legs,</i>	Baibo.	<i>The moon,</i>	Wurroo.
<i>The feet,</i>	Dunceala.	<i>The sea,</i>	Aidassée.
<i>The toes,</i>	Kissovei yilla.	<i>Water,</i>	Ailea.
<i>The arms,</i>	Camacoo.	<i>Fire,</i>	Aee.
<i>The hand,</i>	Wulaba.	<i>To die,</i>	Maate.
<i>A buffalo,</i>	Cabaou.	<i>To sleep,</i>	Tabudge.
<i>A horse,</i>	Djara.	<i>To rise,</i>	Tateetoo.
<i>A hog,</i>	Vavee.	<i>One,</i>	Uffe.
<i>A sheep,</i>	Doomba.	<i>Two,</i>	Lhua.
<i>A goat,</i>	Kefavoo.	<i>Three,</i>	Tullu.
<i>A dog,</i>	Guaca.	<i>Four,</i>	Uppah.
<i>A cat,</i>	Maio.	<i>Five,</i>	Lumme.
<i>A fowl,</i>	Mannu.	<i>Six,</i>	Unna.
<i>The tail,</i>	Carow.	<i>Seven,</i>	Pedu.
<i>The beak,</i>	Pangoutoo.	<i>Eight,</i>	Arru.
<i>A fish,</i>	Ica.	<i>Nine,</i>	Saou.
<i>A turtle,</i>	Unjoo.	<i>Ten,</i>	Singooroo.
<i>A cocoa-nut,</i>	Nieu.	<i>Eleven,</i>	Singurung usse.
<i>Fan-palm,</i>	Boaceree.	20,	Lhuangooroo.
<i>Areca,</i>	Calella.	100,	Sing affu.
<i>Betele,</i>	Canana.	1000,	Setuppah.
<i>Lime,</i>	Aou.	10,000,	Selacussa,
<i>A fish-hook,</i>	Maänadoo.	100,000,	Serata.
<i>Tattoo, the marks</i>	} Tata.	1,000,000	Sereboo.
<i>on the skin,</i>			

In this account of the island of Savu it must be remembered, that except the facts in which we were parties, and the account of the objects which we had an opportunity to examine, the whole is founded merely upon the report of Mr. Lange, upon whose authority alone therefore it must rest.

C H A P. XII.

The Run from the Island of Savu to Batavia, and an Account of the Transactions there while the Ship was refitting.

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Friday 21.

IN the morning of Friday the 21st of September, 1770, we got under fail, and stood away to the westward, along the north side of the island of Savu, and of the smaller that lies to the westward of it, which at noon bore from us S.S.E. distant two leagues. At four o'clock in the afternoon, we discovered a small low island, bearing S. S. W. distant three leagues, which has no place in any chart now extant, at least in none that I have been able to procure: it lies in latitude $10^{\circ} 47' S.$, longitude $238^{\circ} 28' W.$

Saturday 22.
Sunday 23.

At noon on the 22d, we were in latitude $11^{\circ} 10' S.$, longitude $240^{\circ} 38' W.$ In the evening of the 23d, we found the variation of the needle to be $2^{\circ} 44' W.$; as soon as we got clear of the islands we had constantly a swell from the southward, which I imagined was not caused by a wind blowing from that quarter, but by the sea being so determined by the position of the coast of New Holland.

Monday 24.
Tuesday 25.
Wednes. 26.

At noon on the 26th, being in latitude $10^{\circ} 47' S.$, longitude $249^{\circ} 52' W.$ we found the variation to be $3^{\circ} 10' W.$ and our situation to be twenty-five miles to the northward of the log; for which I know not how to account. At noon on the

Thursday 27.

27th, our latitude by observation was $10^{\circ} 51' S.$ which was agreeable to the log; and our longitude was $252^{\circ} 11' W.$

Friday 28.

We steered N. W. all day on the 28th, in order to make the land

land of Java; and at noon on the 29th, our latitude by observation was $9^{\circ} 31' S.$, longitude $254^{\circ} 10' W.$; and in the morning of the 30th, I took into my possession the log-book and journals, at least all I could find, of the officers, petty officers, and seamen, and enjoined them secrecy with respect to where they had been.

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Saturday 29.
Sunday 30.

At seven in the evening, being in the latitude of Java Head, and not seeing any land, I concluded that we were too far to the westward: I therefore hauled up E.N.E. having before steered N. by E. In the night, we had thunder and lightning; and about twelve o'clock, by the light of the flashes, we saw the land bearing east. I then tacked and stood to the S.W. till four o'clock in the morning of the 1st of October; and at six, Java Head, or the west end of Java, bore S. E. by E. distant five leagues: soon after we saw Prince's Island, bearing E. $\frac{1}{2}$ S.; and at ten, the island of Cracatoa, bearing N.E. Cracatoa is a remarkably high-peaked island, and at noon it bore N. 40° E. distant seven leagues.

October.
Monday 1.

I must now observe that, during our run from Savu, I allowed twenty minutes a-day for the westerly current, which I concluded must run strong at this time, especially off the coast of Java, and I found that this allowance was just equivalent to the effect of the current upon the ship.

At four o'clock in the morning of the 2d, we fetched close in with the coast of Java, in fifteen fathom; we then stood along the coast, and early in the forenoon, I sent the boat ashore to try if she could procure some fruit for Tupia, who was very ill, and some grafs for the buffaloes that were still alive. In an hour or two she returned with four cocoa-nuts, and a small bunch of plantains, which had been purchased for a shilling, and some herbage for the cattle, which the Indians not only gave us, but assisted our people to cut. The

Tuesday 2.

1770.
October.
Tuesday 2.

country looked like one continued wood, and had a very pleasant appearance.

About eleven o'clock, we saw two Dutch ships lying off Anger point, and I sent Mr. Hicks on board of one of them to enquire news of our country, from which we had been absent so long. In the mean time it fell calm, and about noon I anchored in eighteen fathom with a muddy bottom. When Mr. Hicks returned, he reported that the ships were Dutch East Indiamen from Batavia, one of which was bound to Ceylon, and the other to the coast of Malabar; and that there was also a flyboat or packet, which was said to be stationed here to carry letters from the Dutch ships that came hither to Batavia, but which I rather think was appointed to examine all ships that pass the strait: from these ships we heard, with great pleasure, that the Swallow had been at Batavia about two years before.

Wednes. 3.

At seven o'clock a breeze sprung up at S. S. W. with which having weighed, we stood to the N. E. between Thwart-the-way-Island and the Cap, sounding from eighteen to twenty-eight fathom: we had but little wind all night, and having a strong current against us, we got no further by eight in the morning than Bantam Point. At this time the wind came to the N. E. and obliged us to anchor in two and twenty fathom, at about the distance of two miles from the shore; the point bore N. E. by E. distant one league, and here we found a strong current setting to the N. W. In the morning we had seen the Dutch packet standing after us, but when the wind shifted to the N. E. she bore away.

At six o'clock in the evening, the wind having obliged us to continue at anchor, one of the country boats came alongside of us, on board of which was the Master of the packet. He seemed to have two motives for his visit, one to take an

account of the ship, and the other to sell us refreshments; for in the boat were turtle, fowls, ducks, parrots, paroquets, rice-birds, monkies, and other articles, which they held at a very high price, and brought to a bad market, for our Savu stock was not yet expended: however, I gave a Spanish dollar for a small turtle, which weighed about six and thirty pounds; I gave also a dollar for ten large fowls, and afterwards bought fifteen more at the same price; for a dollar we might also have bought two monkies, or a whole cage of rice-birds. The Master of the sloop brought with him two books, in one of which he desired that any of our officers would write down the name of the ship and its Commander, with that of the place from which she sailed, and of the port to which she was bound, with such other particulars relating to themselves, as they might think proper, for the information of any of our friends that should come after us: and in the other he entered the names of the ship and the Commander, himself, in order to transmit them to the Governor and Council of the Indies. We perceived that in the first book many ships, particularly Portuguese, had made entries of the same kind with that for which it was presented to us. Mr. Hicks, however, having written the name of the ship, only added "from Europe." He took notice of this, but said, that he was satisfied with any thing we thought fit to write, it being intended merely for the information of those who should enquire after us from motives of friendship.

1770.
October.
Wednes. 3.

Having made several attempts to sail with a wind that would not stem the current, and as often come to an anchor, a proa came alongside of us in the morning of the 5th, in which was a Dutch officer, who sent me down a printed paper in English, duplicates of which he had in other lan-

Friday 5.

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Friday 5.

guages, particularly in French and Dutch, all regularly signed, in the name of the Governor and Council of the Indies, by their secretary: it contained nine questions, very ill expressed, in the following terms:

- “ 1. To what nation the ship belongs, and its name?
- “ 2. If it comes from Europe, or any other place?
- “ 3. From what place it lastly departed from?
- “ 4. Whereunto designed to go?
- “ 5. What and how many ships of the Dutch Company
“ by departure from the last shore there layed, and their
“ names?
- “ 6. If one or more of these ships in company with this,
“ is departed for this, or any other place?
- “ 7. If during the voyage any particularities is happened
“ or seen?
- “ 8. If not any ships in sea, or the Streights of Sunda, have
“ seen or hailed in, and which?
- “ 9. If any other news worth of attention, at the place
“ from whence the ship lastly departed, or during the voy-
“ age, is happened.
- “ BATAVIA, in the Castle.
- “ By order of the Governor General, and the
“ Counsellors of India,

“ J. BRANDER BUNGL, Sec.”

Of these questions I answered only the first and the fourth; which when the officer saw, he said answers to the rest were of no consequence: yet he immediately added, that he must send that very paper away to Batavia, and that it would be there the next day at noon. I have particularly related this incident,

incident, because I have been credibly informed that it is but of late years that the Dutch have taken upon them to examine ships that pass through this Streight.

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October.
Friday 5.

At ten o'clock the same morning, we weighed, with a light breeze at S.W.; but did little more than stem the current, and about two o'clock anchored again under Bantam Point, where we lay till nine; a light breeze then springing up at S.E. we weighed and stood to the eastward till ten o'clock the next morning, when the current obliged us again to anchor in twenty-two fathom, Pulababi bearing E. by S. $\frac{1}{4}$ S. distant between three and four miles. Having alternately weighed and anchored several times, till four in the afternoon of the 7th, we then stood to the eastward; with a very faint breeze at N.E. and passed Wapping Island, and the first island to the eastward of it; when the wind dying away, we were carried by the current between the first and second of the islands that lie to the eastward of Wapping Island, where we were obliged to anchor in thirty fathom, being very near a ledge of rocks that run out from one of the islands. At two the next morning we weighed with the land wind at south, and stood out clear of the shoal; but before noon were obliged to come to again in twenty-eight fathom, near a small island among those that are called the Thousand Islands, which we did not find laid down in any chart. Pulo Pare at this time bore E.N.E. distance between six and seven miles.

Saturday 6.

Sunday 7.

Monday 8.

Mr. Banks and Dr. Solander went ashore upon the island, which they found not to be more than five hundred yards long, and one hundred broad; yet there was a house upon it, and a small plantation, where among other things was the *Palma Christi*, from which the castor oil is made in the West Indies: they made a small addition to their collection of plants, and shot a bat, whose wings when extended mea-

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Monday 8.

fured three feet from point to point : they shot also four plovers, which exactly resembled the golden plover of England. Soon after they returned, a small Indian boat came alongside with two Malays on board, who brought three turtles, some dried fish, and a few pumpkins : we bought the turtle, which altogether weighed a hundred and forty-six pounds, for a dollar, and considering that we had lately paid the Dutchman a dollar for one that weighed only six and thirty pounds, we thought we had a good bargain. The seller appeared equally satisfied, and we then treated with him for his pumpkins, for which he was very unwilling to take any money but a dollar ; we said that a whole dollar was greatly too much ; to which he readily assented, but desired that we would cut one and give him a part : at last, however, a fine shining Portuguese petacka tempted him, and for that he sold us his whole stock of pumpkins, being in number twenty-six. At parting, he made signs that we should not tell at Batavia that any boat had been aboard us.

Tuesday 9.

We were not able to weather Pulo Pare this day, but getting the land wind at south about ten o'clock at night, we weighed and stood to the E. S. E. all night. At ten in the morning, we anchored again, to wait for the sea breeze ; and at noon it sprung up at N. N. E. with which we stood in for Batavia road, where at four o'clock in the afternoon we came to an anchor.

We found here the Harcourt Indiaman from England, two English private traders of that country, thirteen sail of large Dutch ships, and a considerable number of small vessels. A boat came immediately on board, from a ship which had a broad pendant flying, and the officer who commanded having enquired who we were, and whence we came, immediately returned with such answers as we thought fit to give him :

him: both he and his people were as pale as spectres, a sad presage of our sufferings in so unhealthy a country; but our people, who, except Tupia, were all rosy and plump, seemed to think themselves so seasoned by various climates that nothing could hurt them: In the mean time, I sent a Lieutenant ashore to acquaint the Governor of our arrival, and to make an excuse for our not saluting; for as I could salute with only three guns, except the swivels, which I was of opinion would not be heard, I thought it was better to let it alone. As soon as the boat was dispatched the carpenter delivered me an account of the defects of the ship, of which the following is a copy:

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Tuesday 9.

“ The defects of his Majesty’s bark Endeavour, Lieutenant
“ James Cook Commander.

“ The ship very leaky, as she makes from twelve to six
“ inches water an hour, occasioned by her main keel being
“ wounded in many places, and the scarfs of her stern being
“ very open: the false keel gone beyond the midships from
“ forward, and perhaps farther, as I had no opportunity of
“ seeing for the water when hauled ashore for repairing:
“ wounded on the larboard side under the main channel,
“ where I imagine the greatest leak is, but could not come
“ at it for the water: one pump on the larboard side useless;
“ the others decayed within an inch and an half of the bore.
“ Otherwise masts, yards, boats, and hull, in pretty good
“ condition.”

As it was the universal opinion that the ship could not safely proceed to Europe without an examination of her bottom, I determined to apply for leave to heave her down at this place; and as I understood that it would be necessary to make this application in writing, I drew up a request, and

the

1770.
October.
Wednes. 10.

the next morning, having got it translated into Dutch, we all went ashore.

We repaired immediately to the house of Mr. Leith, the only Englishman of any credit who is resident at this place; he received us with great politeness, and engaged us to dinner: to this gentleman we applied for instructions how to provide ourselves with lodgings and necessaries while we should stay ashore, and he told us, that there was a hotel, or kind of inn, kept by the order of government, where all merchants and strangers were obliged to reside, paying half per cent upon the value of their goods for warehouse room, which the master of the house was obliged to provide; but that as we came in a King's ship, we should be at liberty to live where we pleased, upon asking the Governor's permission, which would be granted of course. He said, that it would be cheaper for us to take a house in the town, and bring our own servants ashore, if we had any body upon whom we could depend to buy in our provisions; but as this was not the case, having no person among us who could speak the Malay language, our gentlemen determined to go to the hotel. At the hotel, therefore, beds were immediately hired, and word was sent that we should sleep there at night.

At five o'clock in the afternoon, I was introduced to the Governor-General, who received me very courteously; he told me, that I should have every thing I wanted, and that in the morning my request should be laid before the council, which I was desired to attend.

About nine o'clock, we had a dreadful storm of thunder, lightning, and rain, during which the main-mast of one of the Dutch East Indiamen was split, and carried away by the deck; the main-top-mast and top-gallant-mast were shivered
all

all to pieces; she had an iron spindle at the main-top-gallant-mast-head, which probably directed the stroke. This ship lay not more than the distance of two cables' length from ours, and in all probability we should have shared the same fate, but for the electrical chain which we had but just got up, and which conducted the lightning over the side of the ship; but though we escaped the lightning, the explosion shook us like an earthquake, the chain at the same time appearing like a line of fire: a sentinel was in the action of charging his piece, and the shock forced the musket out of his hand, and broke the rammer rod. Upon this occasion, I cannot but earnestly recommend chains of the same kind to every ship, whatever be her destination, and I hope that the fate of the Dutchman will be a warning to all who shall read this narrative, against having an iron spindle at the mast-head.

1770.
October.
Wednes. 10.

The next morning, I attended at the council-chamber, and was told that I should have every thing I wanted. In the mean time, the gentlemen ashore agreed with the keeper of the hotel for their lodging and board, at the rate of two rix-dollars, or nine shillings sterling a day for each; and as there were five of them, and they would probably have many visitors from the ship, he agreed to keep them a separate table, upon condition that they should pay one rix-dollar for the dinner of every stranger, and another for his supper and bed, if he should sleep ashore. Under this stipulation they were to be furnished with tea, coffee, punch, pipes and tobacco, for themselves and their friends, as much as they could consume; they were also to pay half a rupee, or one shilling and three pence a day for each of their servants.

Thursday 11.

They soon learnt that these rates were more than double the common charges of board and lodging in the town, and

1770.
October.
Thursday 11.

their table, though it had the appearance of magnificence, was wretchedly served. Their dinner consisted of one course of fifteen dishes, and their supper of one course of thirteen, but nine or ten of them consisted of bad poultry, variously dressed, and often served up the second, third, and even the fourth time: the same duck having appeared more than once roasted, found his way again to the table as a fricasee, and a fourth time in the form of forced meat. It was not long, however, before they learnt that this treatment was only by way of essay, and that it was the invariable custom of the house, to supply all strangers, at their first coming, with such fare as could be procured for the least money, and consequently would produce the most gain: that if either through indolence or good-nature they were content, it was continued for the benefit of the host, but that if they complained, it was gradually amended till they were satisfied, which sometimes happened before they had the worth of their money. After this discovery, they remonstrated, and their fare became better; however, after a few days, Mr. Banks hired a little house, the next door on the left hand to the hotel, for himself and his party, for which he paid after the rate of ten rix-dollars, or two pounds five shillings sterling a month; but here they were very far from having either the convenience or the privacy which they expected; no person was permitted to sleep in this private house occasionally, as a guest to the person who hired it, under a penalty, but almost every Dutchman that went by ran in without any ceremony, to ask what they sold, there having been very seldom any private persons at Batavia who had not something to sell. Every body here hires a carriage, and Mr. Banks hired two. They are open chaises, made to hold two people, and driven by a man sitting on a coach-box; for each of these he paid two rix-dollars a day.

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October.
Thursday 11.

As soon as he was settled in his new habitation, he sent for Tupia, who till now had continued on board upon account of his illness, which was of the bilious kind, and for which he had obstinately refused to take any medicine. He soon came ashore, with his boy Tayeto, and though while he was on board, and after he came into the boat, he was exceedingly listless and dejected, he no sooner entered the town than he seemed to be animated with a new soul. The houses, carriages, streets, people, and a multiplicity of other objects, all new, which rushed upon him at once, produced an effect like the sudden and secret power that is imagined of fascination. Tayeto expressed his wonder and delight with still less restraint, and danced along the street in a kind of extasy, examining every object with a restless and eager curiosity, which was every moment excited and gratified. One of the first things that Tupia remarked, was the various dresses of the passing multitude, concerning which he made many enquiries; and when he was told that in this place, where people of many different nations were assembled, every one wore the habit of his country, he desired that he might conform to the custom, and appear in that of Otaheite. South Sea cloth was therefore sent for from the ship, and he equipped himself with great expedition and dexterity. The people who had seen Otourou, the Indian who had been brought hither by M. Bougainville, enquired whether Tupia was not the same person: from these enquiries, we learnt who it was that we had supposed to be Spaniards, from the accounts that had been given of two ships by the Islanders.

In the mean time, I procured an order to the superintendent of the island of Ourou, where the ship was to be repaired, to receive her there; and sent by one of the ships that sailed for Holland, an account of our arrival here, to Mr. Stephens, the Secretary to the Admiralty.

1770.
October.
Thursday 11.

The expences that would be incurred by repairing and refitting the ship, rendered it necessary for me to take up money in this place, which I imagined might be done without difficulty, but I found myself mistaken; for after the most diligent enquiry, I could not find any private person that had ability and inclination to advance the sum that I wanted. In this difficulty I applied to the Governor himself, by a written request, in consequence of which, the Shebander had orders to supply me with what money I should require out of the Company's Treasury.

Thursday 18.

On the 18th, as soon as it was light, having by several accidents and mistakes suffered a delay of many days, I took up the anchor, and ran down to Ourust: a few days afterwards, we went along-side of the wharf, on Cooper's Island, which lies close to Ourust, in order to take out our stores.

By this time, having been here only nine days, we began to feel the fatal effects of the climate and situation. Tupia, after the flow of spirits which the novelties of the place produced upon his first landing, sunk on a sudden, and grew every day worse and worse. Tayeto was seized with an inflammation upon his lungs, Mr. Banks's two servants became very ill, and himself and Dr. Solander were attacked by fevers: in a few days, almost every person both on board and ashore was sick; affected, no doubt, by the low swampy situation of the place, and the numberless dirty canals which intersect the town in all directions. On the 26th, I set up the tent for the reception of the ship's company, of whom there was but a small number able to do duty. Poor Tupia, of whose life we now began to despair, and who till this time had continued ashore with Mr. Banks, desired to be removed to the ship, where, he said, he should breathe a freer air than among the numerous houses which obstructed it
ashore.

ashore: on board the ship, however, he could not go, for she was unrigged, and preparing to be laid down at the careening place; but on the 28th, Mr. Banks went with him to Cooper's Island, or, as it is called here, Kuypor, where she lay, and as he seemed pleased with the spot, a tent was there pitched for him: at this place, both the sea breeze and the land breeze blew directly over him, and he expressed great satisfaction in his situation. Mr. Banks, whose humanity kept him two days with this poor Indian, returned to the town on the 30th, and the fits of his intermittent, which was now become a regular tertian, were so violent as to deprive him of his senses while they lasted, and leave him so weak that he was scarcely able to crawl down stairs: at this time, Dr. Solander's disorder also increased, and Mr. Monkhouse, the Surgeon, was confined to his bed.

1770.
October.

Sunday 28.

Tuesday 30.

On the fifth of November, after many delays in consequence of the Dutch ships coming along-side the wharfs to load pepper, the ship was laid down, and the same day, Mr. Monkhouse, our Surgeon, a sensible, skilful man, fell the first sacrifice to this fatal country, a loss which was greatly aggravated by our situation. Dr. Solander was just able to attend his funeral, but Mr. Banks was confined to his bed. Our distress was now very great, and the prospect before us discouraging in the highest degree: our danger was not such as we could surmount by any efforts of our own; courage, skill, and diligence were all equally ineffectual, and death was every day making advances upon us, where we could neither resist nor fly. Malay servants were hired to attend the sick, but they had so little sense either of duty or humanity, that they could not be kept within call, and the patient was frequently obliged to get out of bed to seek them. On the 9th, we lost our poor Indian boy Tayeto, and Tupia was

November;
Monday 5.

Friday 9.

so

1770.
November.
Friday 9.

so much affected, that it was doubted whether he would survive till the next day.

In the mean time, the bottom of the ship being examined, was found to be in a worse condition than we apprehended: the false keel was all gone to within twenty feet of the stern post; the main keel was considerably injured in many places; a great quantity of the sheathing was torn off, and several planks were much damaged; two of them, and the half of a third, under the main channel near the keel, were, for the length of six feet, so worn, that they were not above an eighth part of an inch thick, and here the worms had made their way quite into the timbers; yet in this condition she had sailed many hundred leagues, where navigation is as dangerous as in any part of the world: how much misery did we escape, by being ignorant that so considerable a part of the bottom of the vessel was thinner than the sole of a shoe, and that every life on board depended upon so slight and fragile a barrier between us and the unfathomable ocean! It seemed, however, that we had been preserved only to perish here; Mr. Banks and Dr. Solander were so bad that the physician declared they had no chance for recovery but by removing into the country; a house was therefore hired for them, at the distance of about two miles from the town, which belonged to the master of the hotel, who engaged to furnish them with provisions, and the use of slaves. As they had already experienced their want of influence over slaves that had other masters, and the unfeeling inattention of these fellows to the sick, they bought each of them a Mallay woman, which removed both the causes of their being so ill served; the women were their own property, and the tenderness of the sex, even here, made them good nurses. While these preparations were making, they received an
account

account of the death of Tupia, who sunk at once after the loss of the boy, whom he loved with the tenderness of a parent.

1770.
November:

By the 14th, the bottom of the ship was thoroughly repaired, and very much to my satisfaction: it would, indeed, be injustice to the officers and workmen of this yard, not to declare that, in my opinion, there is not a marine yard in the world, where a ship can be laid down with more convenience, safety, and dispatch, nor repaired with more diligence and skill. At this place they heave down by two masts, a method which we do not now practise; it is, however, unquestionably more safe and expeditious to heave down with two masts than one; and he must have a good share of bigotry to old customs, and an equal want of common sense, who will not allow this, after seeing with what facility the Dutch heave down their largest ships at this place.

Wednes. 14.

Mr. Banks and Dr. Solander recovered slowly at their country-house, which was not only open to the sea breeze, but situated upon a running stream, which greatly contributed to the circulation of the air: but I was now taken ill myself; Mr. Sporing, and a seaman who had attended Mr. Banks, were also seized with intermittents; and indeed there was not more than ten of the whole ship's company that were able to do duty.

We proceeded however in rigging the ship, and getting water and stores aboard: the water we were obliged to procure from Batavia, at the rate of six shillings and eight pence a leager, or one hundred and fifty gallons.

About the 26th, the westerly monsoon set in, which generally blows here in the night from the S. W. and in the day from the N. W. or N. For some nights before this, we had very heavy rain, with much thunder; and in the night between:

Monday 26.

1770.
November.
Monday 26.

tween the 25th and 26th, such rain as we had seldom seen, for near four hours without intermission. Mr. Banks's house admitted the water in every part like a sieve, and it ran through the lower rooms in a stream that would have turned a mill: he was by this time sufficiently recovered to go out, and upon his entering Batavia the next morning, he was much surpris'd to see the bedding every where hung out to dry.

The wet season was now set in, though we had some intervals of fair weather. The frogs in the ditches, which croak ten times louder than any frogs in Europe, gave notice of rain by an incessant noise that was almost intolerable, and the gnats and musquitos, which had been very troublesome even during the dry weather, were now become innumerable, swarming from every plash of water like bees from a hive; they did not, however, much incommode us in the day, and the stings, however troublesome at first, never continued to itch above half an hour, so that none of us felt in the day, the effects of the wounds they had received in the night.

December.
Saturday 8.

On the 8th of December, the ship being perfectly refitted, and having taken in most of her water and stores, and received her sick on board, we ran up to Batavia Road, and anchored in four fathom and an half of water.

Monday 24.

From this time, to the 24th, we were employed in getting on board the remainder of our water and provisions, with some new pumps, and in several other operations that were necessary to fit the ship for the sea, all which would have been effected much sooner, if sickness and death had not disabled or carried off a great number of our men.

While we lay here, the Earl of Elgin, Captain Cook, a ship belonging to the English East India Company, came to an anchor

anchor in the Road. She was bound from Madrafs to China, but having lost her passage, put in here to wait for the next season. The Phoenix, Captain Black, an English country ship, from Bencoolen, also came to an anchor at this place.

1770.
December.
Monday 24.

In the afternoon of Christmas eve, the 24th, I took leave of the Governor, and several of the principal gentlemen of the place, with whom I had formed connections, and from whom I received every possible civility and assistance; but in the mean time an accident happened, which might have produced disagreeable consequences. A seaman had run away from one of the Dutch ships in the Road, and entered on board of mine: the Captain had applied to the Governor, to reclaim him as a subject of Holland, and an order for that purpose was procured: this order was brought to me soon after I returned from my last visit, and I said, that if the man appeared to be a Dutchman, he should certainly be delivered up. Mr. Hicks commanded on board, and I gave the Dutch officer an order to him, to deliver the man up under that condition. I slept myself this night on shore, and in the morning, the Captain of the Dutch Com-
modore came and told me that he had carried my order on board, but that the officer had refused to deliver up the man, alleging, not only that he was not a Dutchman, but that he was a subject of Great Britain, born in Ireland; I replied, that the officer had perfectly executed my orders, and that if the man was an English subject, it could not be expected that I should deliver him up. The Captain then said, that he was just come from the Governor, to demand the man of me in his name, as a subject of Denmark, alleging, that he stood in the ship's books as born at Elfsneur. The claim of this man as a subject of Holland, being now given up, I observed to the Captain, that there appeared to be some

Tuesday 25.

1770.
December.
Tuesday 26.

mistake in the General's message, for that he would certainly never demand a Danish seaman from me, who had committed no other crime than preferring the service of the English to that of the Dutch. I added, however, to convince him of my sincere desire to avoid disputes, that if the man was a Dane he should be delivered up as a courtesy, though he could not be demanded as a right; but that if I found he was an English subject, I would keep him at all events. Upon these terms we parted, and soon after I received a letter from Mr. Hicks, containing indubitable proof that the seaman in question was a subject of his Britannic Majesty. This letter I immediately carried to the Shebander, with a request that it might be shewn to the Governor, and that his Excellency might at the same time be told, I would not upon any terms part with the man. This had the desired effect, and I heard no more of the affair.

In the evening, I went on board, accompanied by Mr. Banks, and the rest of the gentlemen who had constantly resided on shore, and who, though better, were not yet perfectly recovered.

Wednes. 26. At six in the morning, of the 26th, we weighed and set sail, with a light breeze at S. W. The Elgin Indiaman saluted us with three cheers and thirteen guns, and the garrison with fourteen, both which, with the help of our swivels, we returned, and soon after the sea breeze set in at N. by W. which obliged us to anchor just without the ships in the Road.

At this time, the number of sick on board amounted to forty, and the rest of the ship's company were in a very feeble condition. Every individual had been sick except the sail-maker, an old man between seventy and eighty years of age,

age, and it is very remarkable that this old man, during our stay at this place, was constantly drunk every day: we had buried seven, the Surgeon, three seamen, Mr. Green's servant, Tupia, and Tayeto his boy. All but Tupia fell a sacrifice to the unwholesome, stagnant, putrid air of the country, and he who from his birth had been used to subsist chiefly upon vegetable food, particularly ripe fruit, soon contracted all the disorders that are incident to a sea life, and would probably have sunk under them before we could have completed our voyage, if we had not been obliged to go to Batavia to refit.

1770.
December.
Wednesd. 26.

C H A P. XIII.

*Some Account of Batavia, and the adjacent Country ; with
their Fruits, Flowers, and other Productions.*

1770.
December.

BATAVIA, the capital of the Dutch dominions in India, and generally supposed to have no equal among all the possessions of the Europeans in Asia, is situated on the north side of the island of Java, in a low fenny plain, where several small rivers, which take their rise in the mountains called Blaeuwen Berg, about forty miles up the country, empty themselves into the sea, and where the coast forms a large bay, called the Bay of Batavia, at the distance of about eight leagues from the strait of Sunda. It lies in latitude $6^{\circ} 10' S.$ and longitude $106^{\circ} 50' E.$ from the meridian of Greenwich, as appears from astronomical observations made upon the spot, by the Reverend Mr. Mohr, who has built an elegant observatory, which is as well furnished with instruments as most in Europe.

The Dutch seem to have pitched upon this spot for the convenience of water-carriage, and in that it is indeed a second Holland, and superior to every other place in the world. There are very few streets that have not a canal of considerable breadth running through them, or rather stagnating in them, and continued for several miles in almost every direction beyond the town, which is also intersected by five or six rivers, some of which are navigable thirty or forty miles up the country. As the houses are large, and the streets wide, it takes up a much greater extent, in proportion

portion to the number of houses it contains, than any city in Europe. Valentyn, who wrote an account of it about the year 1726, says, that in his time there were, within the walls, 1242 Dutch houses, and 1200 Chinese; and without the walls 1066 Dutch, and 1240 Chinese, besides 12 arrack houses, making in all 4760: but this account appeared to us to be greatly exaggerated, especially with respect to the number of houses within the walls.

1770.
December.

The streets are spacious and handsome, and the banks of the canals are planted with rows of trees, that make a very pleasing appearance; but the trees concur with the canals to make the situation unwholesome. The stagnant canals in the dry season exhale an intolerable stench, and the trees impede the course of the air, by which in some degree the putrid effluvia would be dissipated. In the wet season the inconvenience is equal, for then these reservoirs of corrupted water overflow their banks in the lower part of the town, especially in the neighbourhood of the hotel, and fill the lower stories of the houses, where they leave behind them an inconceivable quantity of slime and filth: yet these canals are sometimes cleaned; but the cleaning them is so managed as to become as great a nuisance as the foulness of the water; for the black mud that is taken from the bottom is suffered to lie upon the banks, that is, in the middle of the street, till it has acquired a sufficient degree of hardness to be made the lading of a boat, and carried away. As this mud consists chiefly of human ordure, which is regularly thrown into the canals every morning; there not being a necessary-house in the whole town, it poisons the air while it is drying to a considerable extent. Even the running streams become nuisances in their turn, by the nastiness or negligence of the people; for every now and then a dead hog,

1770.
December.

hog, or a dead horse, is stranded upon the shallow parts, and it being the business of no particular person to remove the nuisance, it is negligently left to time and accident. While we were here, a dead buffalo lay upon the shoal of a river that ran through one of the principal streets above a week, and at last was carried away by a flood.

The houses are in general well adapted to the climate; they consist of one very large room or hall on the ground floor, with a door at each end, both which generally stand open: at one end a room is taken off by a partition, where the master of the house transacts his business; and in the middle between each end there is a court, which gives light to the hall, and at the same time increases the draught of air. From one corner of the hall the stairs go up to the floor above, where also the rooms are spacious and airy. In the alcove, which is formed by the court, the family dine; and at other times it is occupied by the female slaves, who are not allowed to sit down any where else.

The public buildings are, most of them, old, heavy, and ungraceful; but the new church is not inelegant; it is built with a dome, that is seen from a great distance at sea, and though the outside has rather a heavy appearance, the inside forms a very fine room: it is furnished with an organ of a proper size, being very large, and is most magnificently illuminated by chandeliers.

The town is inclosed by a stone wall, of a moderate height; but the whole of it is old, and many parts are much out of repair. This wall itself is surrounded by a river, which in some places is fifty, and in some a hundred yards wide: the stream is rapid, but the water is shallow. The wall is also lined within by a canal, which in different parts is of different breadths; so that, in passing either out or in through the gates,

gates, it is necessary to cross two draw-bridges; and there is no access for idle people or strangers to walk upon the ramparts, which seem to be but ill provided with guns.

1770.
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In the north east corner of the town stands the castle or citadel, the walls of which are both higher and thicker than those of the town, especially near the landing-place, where there is depth of water only for boats, which it completely commands, with several large guns that make a very good appearance.

Within this castle are apartments for the Governor General, and all the Council of India, to which they are enjoined to repair in case of a siege. Here are also large storehouses, where great quantities of the Company's goods are kept, especially those that are brought from Europe, and where almost all their writers transact their business. In this place also are laid up a great number of cannon, whether to mount upon the walls or furnish shipping, we could not learn; and the Company is said to be well supplied with powder, which is dispersed in various magazines, that if some should be destroyed by lightning, which in this place is very frequent, the rest may escape.

Besides the fortifications of the town, numerous forts are dispersed about the country to the distance of twenty or thirty miles; these seem to have been intended merely to keep the natives in awe, and indeed they are fit for nothing else. For the same purpose a kind of houses, each of which mounts about eight guns, are placed in such situations as command the navigation of three or four canals, and consequently the roads upon their banks: some of these are in the town itself, and it was from one of these that all the best houses belonging to the Chinese were levelled with the ground in the Chinese rebellion of 1740. These defences are scattered over all

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parts of Java, and the other islands of which the Dutch have got possession in these seas. Of one of these singular forts, or fortified houses, we should have procured a drawing, if our Gentlemen had not been confined by sickness almost all the time they were upon the island.

If the Dutch fortifications here are not formidable in themselves, they become so by their situation; for they are among morasses where the roads, which are nothing more than a bank thrown up between a canal and a ditch, may easily be destroyed, and consequently the approach of heavy artillery either totally prevented or greatly retarded: for it would be exceedingly difficult, if not impossible, to transport them in boats, as they all muster every night under the guns of the castle, a situation from which it would be impossible for an enemy to take them. Besides, in this country, delay is death; so that whatever retards an enemy, will destroy him. In less than a week, we were sensible of the unhealthiness of the climate; and in less than a month half the ship's company were unable to do their duty. We were told, that of a hundred soldiers who arrive here from Europe, it was a rare thing for fifty to survive the first year; that of those fifty, half would then be in the hospital, and not ten of the rest in perfect health: possibly this account may be exaggerated; but the pale and feeble wretches whom we saw crawling about with a musquet, which they were scarcely able to carry, inclined us to believe that it was true. Every white inhabitant of the town indeed is a soldier; the younger are constantly mustered, and those who have served five years are liable to be called out when their assistance is thought to be necessary; but as neither of them are ever exercised, or do any kind of duty, much cannot be expected from them. The Portuguese, indeed, are in general
good

good marksmen, because they employ themselves much in shooting wild hogs and deer: neither the Mardykens nor the Chinese know the use of fire-arms; but as they are said to be brave, they might do much execution with their own weapons, swords, lances, and daggers. The Mardykens are Indians of all nations, who are descended from free ancestors, or have themselves been made free.

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But if it is difficult to attack Batavia by land, it is utterly impossible to attack it by sea: for the water is so shallow, that it will scarcely admit a longboat to come within cannon shot of the walls, except in a narrow channel, called the river, that is walled on both sides by strong piers, and runs about half a mile into the harbour. At the other end, it terminates under the fire of the strongest part of the castle; and here its communication with the canals that intersect the town is cut off by a large wooden boom, which is shut every night at six o'clock, and upon no pretence opened till the next morning. The harbour of Batavia is accounted the finest in India, and to all appearance with good reason; it is large enough to contain any number of ships, and the ground is so good that one anchor will hold till the cable decays: it never admits any sea that is troublesome, and its only inconvenience is the shoal water between the road and the river. When the sea breeze blows fresh, it makes a cockling sea that is dangerous to boats: our longboat once struck two or three times as she was attempting to come out, and regained the river's mouth with some difficulty. A Dutch boat, laden with sails and rigging for one of the Indiamen, was entirely lost.

Round the harbour, on the outside, lie many islands, which the Dutch have taken possession of, and apply to different uses. To one of them, called Edam, they transport all Eu-

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Europeans who have been guilty of crimes that are not worthy of death: some are sentenced to remain there ninety-nine years, some forty, some twenty, some less, down to five, in proportion to their offence; and during their banishment, they are employed as slaves in making ropes, and other drudgery. In another island, called Purmerent, they have an hospital, where people are said to recover much faster than at Batavia. In a third, called Kuyper, they have warehouses belonging to the Company, chiefly for rice, and other merchandize of small value; and here the foreign ships, that are to be laid down at Ourust, another of these islands, which with Kuyper has been mentioned before, discharge their cargoes at wharfs which are very convenient for the purpose. Here the guns, sails, and other stores of the Falmouth, a man of war, which was condemned at this place when she was returning from Manilla, were deposited, and the ship herself remained in the harbour with only the warrant officers on board for many years. Remittances were regularly made them from home; but no notice was ever taken of the many memorials they sent, desiring to be recalled. Happily for them, the Dutch thought fit, about six months before our arrival, to sell the vessel and all her stores, by public auction, and send the officers home in their own ships. At Ourust, they repair all their own shipping, and keep a large quantity of naval stores.

The country round Batavia is for some miles a continued range of country houses and gardens. Many of the gardens are very large, and, by some strange fatality, all are planted with trees almost as thick as they can stand; so that the country derives no advantage from its being cleared of the wood that originally covered it, except the fruit of that which has been planted in its room. These impenetrable
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forests stand in a dead flat, which extends some miles beyond them, and is intersected in many directions by rivers, and more still by canals, which are navigable for small vessels. Nor is this the worst, for the fence of every field and garden is a ditch; and interspersed among the cultivated ground there are many filthy fens, bogs, and morasses, as well fresh as salt.

It is not strange that the inhabitants of such a country should be familiar with disease and death: preventive medicines are taken almost as regularly as food; and every body expects the returns of sickness, as we do the seasons of the year. We did not see a single face in Batavia that indicated perfect health, for there is not the least tint of colour in the cheeks either of man or woman: the women indeed are most delicately fair; but with the appearance of disease there never can be perfect beauty. People talk of death with as much indifference as they do in a camp; and when an acquaintance is said to be dead, the common reply is, "Well, he owed me nothing;" or, "I must get my money of his executors."

To this description of the environs of Batavia there are but two exceptions. The Governor's country house is situated upon a rising ground; but its ascent is so inconsiderable, that it is known to be above the common level only by the canals being left behind, and the appearance of a few bad hedges: his Excellency, however, who is a native of this place, has, with some trouble and expence, contrived to inclose his own garden with a ditch; such is the influence of habit both upon the taste and the understanding. A famous market also, called Passar Tanabank, is held upon an eminence that rises perpendicularly about thirty feet above the plain; and except these situations, the ground, for an extent

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of between thirty and forty miles round Batavia, is exactly parallel to the horizon. At the distance of about forty miles inland there are hills of a considerable height, where, as we were informed, the air is healthy, and comparatively cool. Here the vegetables of Europe flourish in great perfection, particularly strawberries, which can but ill bear heat; and the inhabitants are vigorous and ruddy. Upon these hills some of the principal people have country houses, which they visit once a-year; and one was begun for the Governor, upon the plan of Blenheim, the famous seat of the Duke of Marlborough in Oxfordshire, but it has never been finished. To these hills also people are sent by the physicians, for the recovery of their health, and the effects of the air are said to be almost miraculous: the patient grows well in a short time; But constantly relapses soon after his return to Batavia.

But the same situation and circumstances which render Batavia and the country round it unwholesome, render it the best gardener's ground in the world. The soil is fruitful beyond imagination, and the conveniences and luxuries of life that it produces are almost without number.

Rice, which is well known to be the corn of these countries, and to serve the inhabitants instead of bread, grows in great plenty: and I must here observe, that in the hilly parts of Java, and in many of the eastern islands, a species of this grain is planted, which in the western parts of India is intirely unknown. It is called by the natives *Paddy Gunung*, or Mountain rice; this, contrary to the other sort which must be under water three parts in four of the time of its growth, is planted upon the sides of hills where no water but rain can come: it is however planted at the beginning of the rainy season, and reaped in the beginning of the dry. How far this kind of rice might be useful in our West-Indian islands, where no

bread corn is grown, it may perhaps be worth while to enquire.

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Indian corn, or maize, is also produced here; which the inhabitants gather when young, and toast in the ear. Here is also a great variety of kidney beans, and lentiles, which they call *Cadjang*, and which make a considerable part of the food of the common people; besides millet, yams both wet and dry, sweet potatoes, and European potatoes, which are very good, but not cultivated in great plenty. In the gardens, there are cabbages, lettuces, cucumbers, rhadishes, the white rhadishes of China, which boil almost as well as a turnep; carrots, parsley, celery, pigeon peas, the egg plant, which broiled, and eaten with pepper and salt, is very delicious; a kind of greens resembling spinage; onions, very small, but excellent; and asparagus: besides some European plants of a strong smell, particularly sage, hyssop, and rue. Sugar is also produced here in immense quantities: very great crops of the finest and largest canes that can be imagined are produced with very little care, and yield a much larger proportion of sugar than the canes of the West Indies. White sugar is sold here at two pence half-penny a pound; and the molasses makes the arrack, of which, as of rum, it is the chief ingredient; a small quantity of rice, and some cocoa-nut wine, being added, chiefly, I suppose, to give it flavour. A small quantity of indigo is also produced here; not as an article of trade, but merely for home consumption.

But the most abundant article of vegetable luxury here, is the fruit; of which there is no less than six and thirty different kinds, and I shall give a very brief account of each:

1. The pine apple; *Bromelia Ananas*. This fruit, which is here called *Nanas*, grows very large, and in such plenty that they may sometimes be bought at the first hand for a farthing.

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thing a piece ; and at the common fruit shops we got three of them for two pence half-penny. They are very juicy and well flavoured ; but we all agreed that we had eaten as good from a hot-house in England : they are however so luxuriant in their growth that most of them have two or three crowns, and a great number of suckers from the bottom of the fruit ; of these Mr. Banks once counted nine, and they are so forward that very often while they still adhered to the parent plant they shot out their fruit, which, by the time the large one became ripe, were of no inconsiderable size. We several times saw three upon one apple, and were told that a plant once produced a cluster of nine, besides the principal : this indeed was considered as so great a curiosity, that it was preserved in sugar, and sent to the Prince of Orange.

2. Sweet oranges. These are very good, but while we were here, sold for six pence a piece.

3. Pumplemoeses, which in the West Indies are called Shaddocks. These were well flavoured, but not juicy ; their want of juice however was an accidental effect of the season.

4. Lemons. These were very scarce ; but the want of them was amply compensated by the plenty of limes.

5. Limes. These were excellent, and to be bought at about twelve pence a hundred. We saw only two or three Seville oranges, which were almost all rind ; and there are many sorts, both of oranges and lemons, which I shall not particularly mention, because they are neither esteemed by Europeans nor the natives themselves.

6. Mangos. This fruit during our stay was so infested with maggots, which bred in the inside of them, that scarcely one in three was eatable ; and the best of them were much inferior to those of Brazil : they are generally compared by
Europeans

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Europeans to a melting peach, which, indeed, they resemble in softness and sweetness, but certainly fall much short in flavour. The climate here, we were told, is too hot and damp for them; but there are as many sorts of them as there are of apples in England, and some are much superior to others. One sort, which is called *Mangha Cowani*, has so strong a smell that a European can scarcely bear one in the room; these, however, the natives are fond of. The three sorts which are generally preferred, are the *Mangha Doodool*, the *Mangha Santock*, and the *Mangha Gure*.

7. Bananes. Of these also there are innumerable sorts, but three only are good; the *Pissang Mas*, the *Pissang Radja*, and the *Pissang Ambou*: all these have a pleasant vinous taste, and the rest are useful in different ways; some are fried in batter, and others are boiled and eaten as bread. There is one which deserves the particular notice of the botanist, because, contrary to the nature of its tribe, it is full of seeds, and is therefore called *Pissang Batu*, or *Pissang Bidjie*; it has however no excellence to recommend it to the taste, but the Malays use it as a remedy for the flux.

8. Grapes. These are not in great perfection, but they are very dear; for we could not buy a moderate bunch for less than a shilling or eighteen pence.

9. Tamarinds. These are in great plenty, and very cheap: the people however do not put them up in the manner practised by the West Indians, but cure them with salt, by which means they become a black mass, so disagreeable to the sight and taste, that few Europeans chuse to meddle with them.

10. Water melons. These are in great plenty, and very good.

11. Pumpkins.

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11. Pumpkins. These are beyond comparison the most useful fruit that can be carried to sea; for they will keep without any care several months, and with sugar and lemon-juice, make a pye that can scarcely be distinguished from one made of the best apples; and with pepper and salt, they are a substitute for turneps, not to be despised.

12. Papaws. This fruit when it is ripe is full of seeds, and almost without flavour; but if when it is green it is pared, and the core taken out, it is better than the best turnep.

13. Guava. This fruit is much commended by the inhabitants of our islands in the West Indies, who probably have a better sort than we met with here, where the smell of them was so disagreeably strong that it made some of us sick; those who tasted them, said, that the flavour was equally rank.

14. Sweet sop. The *Annona squamosa* of Linnæus. This is also a West Indian fruit; it consists only of a mass of large kernels, from which a small proportion of pulp may be sucked, which is very sweet, but has little flavour.

15. Custard apple. The *Annona reticulata* of Linnæus. The quality of this fruit is well expressed by its English name, which it acquired in the West Indies; for it is as like a custard, and a good one too, as can be imagined.

16. The cashew apple. This is seldom eaten on account of its astringency. The nut that grows upon the top of it is well known in Europe.

17. The cocoa-nut. This is also well known in Europe; there are several sorts, but the best of those we found here is called *Calappi Edjou*, and is easily known by the redness of the flesh between the skin and the shell.

18. Mangostan.

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18. Mangostan. The *Garcinia Mangostana* of Linnæus. This fruit, which is peculiar to the East Indies, is about the size of the crab apple, and of a deep red-wine colour: on the top of it is the figure of five or six small triangles joined in a circle, and at the bottom several hollow green leaves, which are remains of the blossom. When they are to be eaten, the skin, or rather flesh, must be taken off, under which are found six or seven white kernels, placed in a circular order, and the pulp with which these are enveloped, is the fruit, than which nothing can be more delicious: it is a happy mixture of the tart and the sweet, which is no less wholesome than pleasant; and with the sweet orange, this fruit is allowed in any quantity to those who are afflicted with fevers, either of the putrid or inflammatory kind.

19. The jamboo. The *Eugenia Mallaccensis* of Linnæus. This fruit is of a deep red colour, and an oval shape; the largest, which are always the best, are not bigger than a small apple; they are pleasant and cooling, though they have not much flavour.

20. The jambu-eyer. A species of the *Eugenia* of Linnæus. Of this fruit there are two sorts of a similar shape, resembling a bell, but differing in colour; one being red, the other white. They somewhat exceed a large cherry in size, and in taste have neither flavour nor even sweetness, containing nothing but a watry juice, slightly acidulated; yet their coolness recommends them in this hot country.

21. Jambu-eyer mauwar. The *Eugenia jambos* of Linnæus. This is more grateful to the smell than the taste; in taste it resembles the conserve of roses, and in smell the fresh scent of those flowers.

22. The pomgranate. This is the same fruit that is known by the same name all over Europe.

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23. Durion. A fruit that in shape resembles a small melon, but the skin is covered with sharp conical spines, whence its name; for *dure*, in the Malay language, signifies prickly. When it is ripe, it divides longitudinally into seven or eight compartments, each of which contains six or seven nuts, not quite so large as chestnuts, which are covered with a substance that in colour and consistence very much resembles thick cream: this is the part that is eaten, and the natives are fond of it to excess. To Europeans it is generally disagreeable at first; for in taste, it somewhat resembles a mixture of cream, sugar, and onions; and in the smell, the onions predominate.

24. Nanca. This fruit, which in some parts of India is called Jack, has, like the Durion, a smell very disagreeable to strangers, and somewhat resembling that of mellow apples mixed with garlic: the flavour is not more adapted to the general taste. In some countries that are favourable to it, it is said to grow to an immense size. Rumphius relates, that it is sometimes so large that a man cannot easily lift it; and we were told by a Malay, that at Madura it is sometimes so large as not to be carried but by the united efforts of two men. At Batavia, however, they never exceed the size of a large melon, which in shape they very much resemble: they are covered with angular prickles, like the shootings of some crystals, which however are not hard enough to wound those who handle them.

25. Champada. This differs from the Nanca in little except size, it not being so big.

26. Rambutan. This is a fruit little known to Europeans; in appearance it very much resembles a chestnut with the husk on, and like that, is covered with small points, which are soft and of a deep red colour: under this skin is the
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 fruit,

fruit, and within the fruit a stone; the eatable part therefore is small in quantity, but its acid is perhaps more agreeable than any other in the whole vegetable kingdom.

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27. Jambolan. This in size and appearance is not unlike a damascene; but in taste is still more astringent, and therefore less agreeable.

28. The Boa Bidarra; or *Rhamnus Fijuba* of Linnæus. This is a round yellow fruit, about the size of a gooseberry; its flavour is like that of an apple, but it has the astringency of a crab.

29. Nam nam. The *Cynometra Cauliflora* of Linnæus. This fruit in shape somewhat resembles a kidney; it is about three inches long, and the outside is very rough: it is seldom eaten raw, but fried with batter it makes a good fritter.

30, 31. The Catappa, or *Terminalia Catappa*; and the Canare, the *Canarium commune* of Linnæus; are both nuts, with kernels somewhat resembling an almond; but the difficulty of breaking the shell is so great, that they are no where publicly sold. Those which we tasted were gathered for curiosity by Mr. Banks, from the tree upon which they grew.

32. The Madja; or *Limonia* of Linnæus; contains, under a hard brittle shell, a lightly acid pulp, which cannot be eaten without sugar; and with it, is not generally thought pleasant.

33. Suntul. The *Trichilia* of Linnæus. This is the worst of all the fruits that I shall particularly mention: in size and shape it resembles the Madja; and within a thick skin contains kernels like those of the Mangostan, the taste of which is both acid and astringent, and so disagreeable that we were surprised to see it exposed upon the fruit-stalls.

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34, 35, 36. The Blimbing, or *Averrhoa Belimbi*; the Blimbing Bessé, or *Averrhoa Carambola*; and the Cherrema, or *Averrhoa acida* of Linnæus, are three species of one genus; and though they differ in shape, are nearly of the same taste. The Blimbing Bessé is the sweetest: the other two are so austere acid, that they cannot be used without dressing; they make however excellent pickles and sour sauce.

37. The Salack; or *Calamus Rotang Zalacca* of Linnæus. This is the fruit of a prickly bush; it is about as big as a walnut, and covered with scales, like those of a lizard: below the scales are two or three yellow kernels, in flavour somewhat resembling a strawberry.

Besides these, the island of Java, and particularly the country round Batavia, produces many kinds of fruit which were not in season during our stay; we were also told that apples, strawberries, and many other fruits from Europe, had been planted up in the mountains, and flourished there in great luxuriance. We saw several fruits preserved in sugar, that we did not see recent from the tree, one of which is called *Kimkit*, and another *Boa Atap*: and here are several others which are eaten only by the natives, particularly the *Kellor*, the *Guilindina*, the *Moringa*, and the *Socum*. The *Socum* is of the same kind with the bread-fruit in the South Sea islands, but so much inferior, that if it had not been for the similitude in the outward appearance both of the fruit and the tree, we should not have referred it to that class. These and some others do not merit to be particularly mentioned.

The quantity of fruit that is consumed at Batavia is incredible; but that which is publicly exposed to sale is generally over-ripe. A stranger however may get good fruit in a street called Passar Piffang, which lies north from the great church,

and very near it. This street is inhabited by none but Chinese fruit-sellers, who are supplied from the gardens of Gentlemen in the neighbourhood of the town, with such as is fresh, and excellent in its kind, for which however they must be paid more than four times the market price.

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The town in general is supplied from a considerable distance, where great quantities of land are cultivated merely for the production of fruit. The country people, to whom these lands belong, meet the people of the town at two great markets; one on Monday, called Passar Sineen; and the other on Saturday, called Passar Tanabank. These fairs are held at places considerably distant from each other, for the convenience of different districts; neither of them however are more than five miles distant from Batavia. At these fairs, the best fruit may be bought at the cheapest rate; and the sight of them to a European is very entertaining. The quantity of fruit is astonishing; forty or fifty cart loads of the finest pine apples, packed as carelessly as turneps in England, are common, and other fruit in the same profusion. The days however on which these markets are held are ill contrived; the time between Saturday and Monday is too short, and that between Monday and Saturday too long: great part of what is bought on Monday is always much the worse for keeping before a new stock can be bought, either by the retailer or consumer; so that for several days in every week there is no good fruit in the hands of any people but the Chinese in Passar Pissang.

The inhabitants of this part of India practise a luxury which seems to be but little attended to in other countries; they are continually burning aromatic woods and resins, and scatter odours round them in a profusion of flowers, possibly as an antidote to the noisome effluvia of their ditches
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and canals. Of sweet smelling flowers they have a great variety, altogether unknown in Europe, the chief of which I shall briefly describe.

1. The *Champacka*, or *Michelia Champacca*. This grows upon a tree as large as an apple tree, and consists of fifteen long narrow petals, which give it the appearance of being double, though in reality it is not so: its colour is yellow, and much deeper than that of a jonquil, to which it has some resemblance in smell.

2. The *Cananga*, or *Uvaria Cananga*, is a green flower, not at all resembling the blossom of any tree or plant in Europe: it has indeed more the appearance of a bunch of leaves than a flower; its scent is agreeable, but altogether peculiar to itself.

3. The *Mulatti*, or *Nyctanthes Sambac*. This is well known in English hot-houses by the name of Arabian jessamine: it grows here in the greatest profusion, and its fragrance, like that of all other Indian flowers, though exquisitely pleasing, has not that over-powering strength which distinguishes some of the same sorts in Europe.

4, 5. The *Combang Caracnassi*, and *Combang Tonquin*, *Percularia Glabro*. These are small flowers, of the dog's-bane kind, very much resembling each other in shape and smell, highly fragrant, but very different from every product of an English garden.

6. The *Bonga Tanjong*, or *Mimusops Elengi* of Linnæus. This flower is shaped like a star of seven or eight rays, and is about half an inch in diameter; it is of a yellowish colour, and has an agreeable smell.

Besides these, there is the *Sundal Malam*, or *Polianthes Tuberosa*. This flower, being the same with our own tuberose, can have

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have no place among those that are unknown in Europe, but I mention it for its Malay name, which signifies “ Intriguer of the Night,” and is not inelegantly conceived. The heat of this climate is so great, that few flowers exhale their sweets in the day; and this in particular, from its total want of scent at that time, and the modesty of its colour, which is white, seems negligent of attracting admirers, but as soon as night comes on, it diffuses its fragrance, and at once compels the attention, and excites the complacency of all who approach it.

These are all sold about the streets every evening at sunset, either strung upon a thread, in wreaths of about two feet long, or made up into nosegays of different forms, either of which may be purchased for about a halfpenny. Besides these, there are, in private gardens, many other sweet flowers, which are not produced in a sufficient quantity to be brought to market. With a mixture of these flowers, and the leaves of a plant called *pandang*, cut into small pieces, persons of both sexes fill their hair and their clothes, and with the same mixture indulge a much higher luxury by strewing it on their beds, so that the chamber in which they sleep, breathes the richest and purest of all odours, unallayed by the fumes which cannot but arise where the sleeper lies under two or three blankets and a quilt, for the bed covering here is nothing more than a single piece of fine chintz.

Before I close my account of the vegetable productions of this part of India, I must take some notice of the spices. Java originally produced none but pepper. This is now sent from hence into Europe to a great value, but the quantity consumed here is very small: the inhabitants use *Cap-sicum*, or, as it is called in Europe, Cayan pepper, almost universally in its stead. Cloves and nutmegs, having been monopolized

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monopolized by the Dutch, are become too dear to be plentifully used by the other inhabitants of this country, who are very fond of them. Cloves, although they are said originally to have been the produce of Machian, or Bachian, a small island far to the eastward, and only fifteen miles to the northward of the line, and to have been from thence diffused by the Dutch, at their first coming into these parts, over all the eastern islands, are now confined to Amboina, and the small isles that lie in its neighbourhood; the Dutch having, by different treaties of peace between them and the conquered kings of all the other islands, stipulated, that they should have only a certain number of trees in their dominions, and in future quarrels, as a punishment for disobedience and rebellion, lessened the quantity, till at last they left them no claim to any. Nutmegs have in a manner been extirpated in all the islands except their first native soil, Banda, which easily supplies every nation upon earth, and would as easily supply every nation in another globe of the same dimensions, if there was any such to which the industrious Hollander could transport the commodity; it is, however, certain, that there are a few trees of this spice upon the coast of New Guinea. There may perhaps be both cloves and nutmegs upon other islands to the eastward; for those, neither the Dutch, nor any other European, seem to think it worth while to examine.

The principal tame quadrupeds of this country are horses, cattle, buffalos, sheep, goats, and hogs. The horses are small, never exceeding in size what we call a stout galloway, but they are nimble and spirited, and are reported to have been found here when the Europeans first came round the Cape of Good Hope. The horned cattle are said to be the same species as those in Europe, but they differ so much in appearance, that we were inclined to doubt it: they have indeed

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deed the *palearia* or *dewlap*, which naturalists make the distinguishing characteristic of the European species, but they certainly are found wild, not only in Java but several of the eastern islands. The flesh of those that we eat at Batavia, had a finer grain than European beef, but it was less juicy, and miserably lean. Buffalos are plenty, but the Dutch never eat them, nor will they drink their milk, being prepossessed with a notion that both are unwholesome, and tend to produce fevers; though the natives and Chinese eat both, without any injury to their health. The sheep are of the kind which have long ears that hang down, and hair instead of wool: the flesh of these is hard and tough, and in every respect the worst mutton we ever saw: we found here, however, a few Cape sheep, which are excellent, but so dear that we gave five and forty shillings a-piece for four of them, the heaviest of which weighed only five and forty pounds. The goats are not better than the sheep, but the hogs, especially the Chinese breed, are incomparable, and so fat, that the purchaser agrees for the lean separately. The butcher, who is always a Chinese, without the least scruple cuts off as much of the fat as he is desired, and afterwards sells it to his countrymen, who melt it down, and eat it instead of butter with their rice: but notwithstanding the excellence of this pork, the Dutch are so strongly prejudiced in favour of every thing that comes from their native country, that they eat only of the Dutch breed, which are here sold as much dearer than the Chinese, as the Chinese are sold dearer than the Dutch in Europe.

Besides these animals, which are tame, they have dogs and cats, and there are among the distant mountains some wild horses and cattle: buffalos are not found wild in any part of Java, though they abound in Macassar, and several other eastern islands. The neighbourhood of Batavia, how-

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ever, is plentifully supplied with two kinds of deer, and wild hogs, which are sold at a reasonable price by the Portuguese, who shoot them, and are very good food.

Among the mountains, and in the desert parts of the island, there are tygers, it is said, in great abundance, and some rhinoceroses; in these parts also there are monkies, and there are a few of them even in the neighbourhood of Batavia.

Of fish, here is an amazing plenty; many sorts are excellent, and all are very cheap, except the few that are scarce. It happens here, as in other places, that vanity gets the better even of appetite: the cheap fish, most of which is of the best kind, is the food only of slaves, and that which is dear, only because it is scarce, and very much inferior in every respect, is placed upon the tables of the rich. A sensible housekeeper once spoke to us freely upon the subject. I know, said he, as well as you, that I could purchase a better dish of fish for a shilling, than what now costs me ten; but if I should make so good a use of my money, I should here be as much despised, as you would be in Europe, if you were to cover your table with offals, fit only for beggars or dogs.

Turtle is also found here, but it is neither so sweet nor so fat as the West Indian turtle, even in London; such as it is, however, we should consider it as a dainty; but the Dutch, among other singularities, do not eat it. We saw some lizards, or Iguanas, here of a very large size; we were told that some were as thick as a man's thigh, and Mr. Banks shot one that was five feet long: the flesh of this animal proved to be very good food.

Poultry is very good here, and in great plenty: fowls of a very large size, ducks, and geese are very cheap; pigeons
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are dear, and the price of turkies extravagant. We sometimes found the flesh of these animals lean and dry, but this was merely the effect of their being ill fed, for those that we fed ourselves were as good as any of the same kind that we had tasted in Europe, and we sometimes thought them even better.

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Wild fowl in general is scarce. We once saw a wild duck in the fields, but never any that were to be sold. We frequently saw snipes of two kinds, one of them exactly the same as that in Europe, and a kind of thrush was always to be had in great plenty of the Portuguese, who, for I know not what reason, seem to have monopolized the wild fowl and game. Of snipes, it is remarkable that they are found in more parts of the world than any other bird, being common almost all over Europe, Asia, Africa, and America.

With respect to drink, Nature has not been quite so liberal to the inhabitants of Java as to some whom she has placed in the less fruitful regions of the north. The native Javanese, and most of the other Indians who inhabit this island, are indeed Mahometans, and therefore have no reason to regret the want of wine; but, as if the prohibition of their law respected only the manner of becoming drunk, and not drunkenness itself, they chew opium, to the total subversion not only of their understanding but their health.

The arrack that is made here, is too well known to need a description: besides which, the palm yields a wine of the same kind with that which has already been described in the account of the island of Savu; it is procured from the same tree, in the same manner, and is sold in three states. The first, in which it is called *Tuac manis*, differs little from that in which it comes from the tree; yet even this has received

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Some preparation altogether unknown to us, in consequence of which it will keep eight and forty hours, though otherwise it would spoil in twelve: in this state it has an agreeable sweetness, and will not intoxicate. In the other two states it has undergone a fermentation, and received an infusion of certain herbs and roots, by which it loses its sweetness, and acquires a taste very austere and disagreeable. In one of these states it is called *Tuac cras*, and in the other *Tuac cuning*, but the specific difference I do not know; in both, however, it intoxicates very powerfully. A liquor called *Tuac* is also made from the cocoa-nut tree, but this is used chiefly to put into the arrack, for in that which is good it is an essential ingredient.

C H A P. XIV.

Some Account of the Inhabitants of Batavia, and the adjacent Country, their Manners, Customs, and Manner of Life.

THE town of Batavia, although, as I have already observed, it is the capital of the Dutch dominions in India, is so far from being peopled with Dutchmen, that not one fifth part, even of the European inhabitants of the town, and its environs, are natives of Holland, or of Dutch extraction: the greater part are Portuguese, and besides Europeans, there are Indians of various nations, and Chinesse, besides a great number of negro slaves. In the troops, there are natives of almost every country in Europe, but the Germans are more than all the rest put together; there are some English and French, but the Dutch, though other Europeans are permitted to get money here, keep all the power in their own hands, and consequently possess all public employments. No man, of whatever nation, can come hither to settle, in any other character than that of a soldier in the Company's service, in which, before they are accepted, they must covenant to remain five years. As soon however as this form has been complied with, they are allowed, upon application to the council, to absent themselves from their corps, and enter immediately into any branch of trade, which their money or credit will enable them to carry on; and by this means it is that all the white inhabitants of the place are soldiers.

Women, however, of all nations, are permitted to settle here, without coming under any restrictions; yet we were told

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told that there were not, when we were at Batavia, twenty women in the place that were born in Europe, but that the white women, who were by no means scarce, were descendants from European parents of the third or fourth generation, the gleanings of many families who had successively come hither, and in the male line become extinct; for it is certain that, whatever be the cause, this climate is not so fatal to the ladies as to the other sex.

These women imitate the Indians in every particular; their dress is made of the same materials, their hair is worn in the same manner, and they are equally enslaved by the habit of chewing betel.

The merchants carry on their business here with less trouble perhaps than in any other part of the world: every manufacture is managed by the Chinese, who sell the produce of their labour to the merchant, resident here, for they are permitted to sell it to no one else; so that when a ship comes in, and bespeaks perhaps a hundred leaguers of arrack, or any quantity of other commodities, the merchant has nothing to do but to send orders to his Chinese to see them delivered on board: he obeys the command, brings a receipt signed by the master of the ship for the goods to his employer, who receives the money, and having deducted his profit, pays the Chinese his demand. With goods that are imported, however, the merchant has a little more trouble, for these he must examine, receive, and lay up in his warehouse, according to the practice of other countries.

The Portuguese are called by the natives *Oranferane*, or Nazareen men, (Oran, being Man in the language of the country,) to distinguish them from other Europeans; yet they are included in the general appellation of *Caper*, or *Cafir*, an opprobrious term, applied by Mahometans to all who do not profess

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profess their faith. These people, however, are Portuguese only in name; they have renounced the religion of Rome, and become Lutherans: neither have they the least communication with the country of their forefathers, or even knowledge of it: they speak indeed a corrupt dialect of the Portuguese language, but much more frequently use the Malay: they are never suffered to employ themselves in any but mean occupations: many of them live by hunting, many by washing linen, and some are handicraftsmen and artificers. They have adopted all the customs of the Indians, from whom they are distinguished chiefly by their features and complexion, their skin being considerably darker, and their noses more sharp; their dress is exactly the same, except in the manner of wearing their hair.

The Indians, who are mixed with the Dutch and Portuguese in the town of Batavia, and the country adjacent, are not, as might be supposed, Javanese, the original natives of the island, but natives of the various islands from which the Dutch import slaves, and are either such as have themselves been manumized, or the descendants of those who formerly received manumission; and they are all comprehended under the general name of *Oranflam*, or *Isalam*, signifying Believers of the true Faith. The natives of every country, however, in other respects keep themselves distinct from the rest, and are not less strongly marked than the slaves by the vices or virtues of their respective nations. Many of these employ themselves in the cultivation of gardens, and in selling fruit and flowers. The betel and areca, which are here called *Siri* and *Pinang*, and chewed by both sexes and every rank in amazing quantities, are all grown by these Indians: lime is also mixed with these roots here as it is in Savu, but it is less pernicious to the teeth, because it is first flaked, and, besides the lime, a substance called *gambir*, which

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which is brought from the continent of India; the better sort of women also add cardamum, and many other aromatics, to give the breath an agreeable smell. Some of the Indians, however, are employed in fishing, and as lightermen, to carry goods from place to place by water; and some are rich, and live with much of the splendour of their country, which chiefly consists in the number of their slaves.

In the article of food these Isalams are remarkably temperate: it consists chiefly of boiled rice, with a small proportion of buffalo, fish, or fowl, and sometimes of dried fish, and dried shrimps, which are brought hither from China; every dish, however, is highly seasoned with Cayan pepper, and they have many kinds of pastry made of rice flower, and other things to which I am a stranger; they eat also a great deal of fruit, particularly plantanes.

But notwithstanding their general temperance, their feasts are plentiful, and, according to their manner, magnificent. As they are Mahometans, wine and strong liquors professedly make no part of their entertainment; neither do they often indulge with them privately, contenting themselves with their betel and opium.

The principal solemnity among them is a wedding, upon which occasion both the families borrow as many ornaments of gold and silver as they can, to adorn the bride and bridegroom, so that their dresses are very showy and magnificent. The feasts that are given upon these occasions among the rich, last sometimes a fortnight, and sometimes longer; and during this time, the man, although married on the first day, is, by the women, kept from his wife.

The language that is spoken among all these people, from what place soever they originally came, is the Malay; at least it is a language so called, and probably it is a very

corrupt dialect of that spoken at Malacca. Every little island indeed has a language of its own, and Java has two or three, but this lingua franca is the only language that is now spoken here, and, as I am told, it prevails over a great part of the East Indies. A dictionary of Malay and English was published in London by Thomas Bowrey, in the year 1701.

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Their women wear as much hair as can grow upon the head, and to increase the quantity, they use oils, and other preparations of various kinds. Of this ornament Nature has been very liberal; it is universally black, and is formed into a kind of circular wreath upon the top of the head, where it is fastened with a bodkin, in a taste which we thought inexpressibly elegant: the wreath of hair is surrounded by another of flowers, in which the Arabian jessamine is beautifully intermixed with the golden stars of the *Bonger Tanjong*.

Both sexes constantly bathe themselves in the river at least once a day, a practice which, in this hot country, is equally necessary both to personal delicacy and health. The teeth of these people also, whatever they may suffer in their colour by chewing beetle, are an object of great attention: the ends of them, both in the upper and under jaw, are rubbed with a kind of whetstone, by a very troublesome and painful operation, till they are perfectly even and flat, so that they cannot lose less than half a line in their length. A deep groove is then made cross the teeth of the upper jaw, parallel with the gums, and in the middle between them and the extremity of the teeth; the depth of this groove is at least equal to one-fourth of the thickness of the teeth, so that it penetrates far beyond what is called the enamel, the least injury to which, according to the dentists of Europe, is fatal; yet among these people, where the practice of thus wounding the enamel is universal, we never saw a rotten

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tooth; nor is the blackness a stain, but a covering, which may be washed off at pleasure, and the teeth then appear as white as ivory, which however is not an excellence in the estimation of the belles and beaux of these nations.

These are the people among whom the practice that is called *a mock*, or running a muck, has prevailed for time immemorial. It is well known, that to run a muck in the original sense of the word, is to get intoxicated with opium, and then rush into the street with a drawn weapon, and kill whoever comes in the way, till the party is himself either killed or taken prisoner; of this several instances happened while we were at Batavia, and one of the officers, whose business it is, among other things, to apprehend such people, told us, that there was scarcely a week in which he, or some of his brethren, were not called upon to take one of them into custody. In one of the instances that came to our knowledge, the party had been severely injured by the perfidy of women, and was mad with jealousy before he made himself drunk with opium; and we were told, that the Indiar who runs a muck is always first driven to desperation by some outrage, and always first revenges himself upon those who have done him wrong: we were also told, that though these unhappy wretches afterwards run into the street with a weapon in their hand, frantic and foaming at the mouth, yet they never kill any but those who attempt to apprehend them, or those whom they suspect of such an intention, and that whoever gives them way is safe. They are generally slaves, who indeed are most subject to insults, and least able to obtain legal redress: freemen, however, are sometimes provoked into this extravagance, and one of the persons who run a muck while we were at Batavia, was free and in easy circumstances. He was jealous of his own brother, whom he first killed, and afterwards two others, who attempted to oppose him:

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him: he did not, however, come out of his house, but endeavoured to defend himself in it, though the opium had so far deprived him of his senses, that of three muskets, which he attempted to use against the officers of justice, not one was either loaded or primed. If the officer takes one of these amocks, or mohawks, as they have been called by an easy corruption, alive, his reward is very considerable, but if he kills them, nothing is added to his usual pay; yet such is the fury of their desperation, that three out of four are of necessity destroyed in the attempt to secure them, though the officers are provided with instruments like large tongs, or pincers, to lay hold of them without coming within the reach of their weapon. Those who happen to be taken alive are generally wounded, but they are always broken alive upon the wheel, and if the physician who is appointed to examine their wounds, thinks them likely to be mortal, the punishment is inflicted immediately, and the place of execution is generally the spot where the first murder was committed.

Among these people, there are many absurd practices and opinions which they derive from their Pagan ancestors: they believe that the devil, whom they call Satan, is the cause of all sickness and adversity, and for this reason, when they are sick, or in distress, they consecrate meat, money, and other things to him as a propitiation. If any one among them is restless, and dreams for two or three nights successively, he concludes that Satan has taken that method of laying his commands upon him, which if he neglects to fulfil, he will certainly suffer sickness or death, though they are not revealed with sufficient perspicuity to ascertain their meaning: to interpret his dream, therefore, he taxes his wits to the uttermost, and if, by taking it literally or figuratively, directly or by contraries, he can put no explanation

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upon it that perfectly satisfies him, he has recourse to the cawin or priest, who assists him with a comment and illustrations, and perfectly reveals the mysterious suggestions of the night. It generally appears that the devil wants victuals or money, which are always allotted him, and being placed on a little plate of cocoa-nut leaves, are hung upon the branch of a tree near the river, so that it seems not to be the opinion of these people, that in prowling the earth the devil "walketh through dry places." Mr. Banks once asked, whether they thought Satan spent the money, or eat the victuals; he was answered, that as to the money it was considered rather as a mulct upon an offender, than a gift to him who had enjoined it, and that therefore if it was devoted by the dreamer, it mattered not into whose hands it came, and they supposed that it was generally the prize of some stranger who wandered that way; but as to the meat they were clearly of opinion that, although the devil did not eat the gross parts, yet, by bringing his mouth near it, he sucked out all its favour without changing its position, so that afterwards it was as tasteless as water.

But they have another superstitious opinion that is still more unaccountable. They believe that women, when they are delivered of children, are frequently at the same time delivered of a young crocodile, as a twin to the infant: they believe that these creatures are received most carefully by the midwife, and immediately carried down to the river, and put into the water. The family in which such a birth is supposed to have happened, constantly put victuals into the river for their amphibious relation, and especially the twin, who, as long as he lives, goes down to the river at stated seasons, to fulfil this fraternal duty, for the neglect of which it is the universal opinion that he will be visited with sickness or death. What could at first produce a notion so
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extravagant and absurd, it is not easy to guess, especially as it seems to be totally unconnected with any religious mystery, and how a fact which never happened, should be pretended to happen every day, by those who cannot be deceived into a belief of it by appearances, nor have any apparent interest in the fraud, is a problem still more difficult to solve. Nothing however can be more certain than the firm belief of this strange absurdity among them, for we had the concurrent testimony of every Indian who was questioned about it, in its favour. It seems to have taken its rise in the islands of Celebes and Boutou, where many of the inhabitants keep crocodiles in their families; but however that be, the opinion has spread over all the eastern islands, even to Timor and Ceram, and westward as far as Java and Sumatra, where, however, young crocodiles are, I believe, never kept.

These crocodile twins are called *Sudaras*, and I shall relate one of the innumerable stories that were told us, in proof of their existence, from ocular demonstration.

A young female slave, who was born and bred up among the English at Bencoolen, and had learnt a little of the language, told Mr. Banks that her father, when he was dying, acquainted her that he had a crocodile for his *sudara*, and solemnly charged her to give him meat when he should be dead, telling her in what part of the river he was to be found, and by what name he was to be called up. That in pursuance of her father's instructions and command, she went to the river, and standing upon the bank, called out *Radja Pouti*, white king, upon which a crocodile came to her out of the water, and eat from her hand the provisions that she had brought him. When she was desired to describe this paternal uncle, who in so strange a shape had taken up his dwelling in the water, she said, that he was not like
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other crocodiles, but much handsomer; that his body was spotted and his nose red; that he had bracelets of gold upon his feet, and earrings of the same metal in his ears. Mr. Banks heard this tale of ridiculous falsehood patiently to the end, and then dismissed the girl, without reminding her, that a crocodile with ears was as strange a monster as a dog with a cloven foot. Some time after this a servant whom Mr. Banks had hired at Batavia, and who was the son of a Dutchman by a Javanese woman, thought fit to acquaint his master that he had seen a crocodile of the same kind, which had also been seen by many others, both Dutchmen and Malays: that being very young, it was but two feet long, and had bracelets of gold upon its feet. There is no giving credit to these stories, said Mr. Banks, for I was told the other day that a crocodile had earrings; and you know that could not be true, because crocodiles have no ears. Ah Sir, said the man, these Sudara Oran are not like other crocodiles; they have five toes upon each foot, a large tongue that fills their mouth, and ears also, although they are indeed very small.

How much of what these people related they believed, cannot be known; for there are no bounds to the credulity of ignorance and folly. In the girl's relation, however, there are some things in which she could not be deceived; and therefore must have been guilty of wilful falsehood. Her father might perhaps give her a charge to feed a crocodile, in consequence of his believing that it was his Sudara; but its coming to her out of the river, when she called it by the name of White King, and taking the food she had brought it, must have been a fable of her own invention; for this being false, it was impossible that she should believe it to be true. The girl's story, however, as well as that of the man, is a strong proof that they both firmly believed the existence

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ence of crocodiles that are Sudaras to men ; and the girl's fiction will be easily accounted for, if we recollect, that the earnest desire which every one feels to make others believe what he believes himself, is a strong temptation to support it by unjustifiable evidence. And the averring what is known to be false, in order to produce in others the belief of what is thought to be true, must, upon the most charitable principles, be imputed to many, otherwise venerable characters, through whose hands the doctrines of Christianity passed for many ages in their way to us, as the source of all the silly fables related of the Romish saints, many of them not less extravagant and absurd than this story of the White King, and all of them the invention of the first relater.

The Bougis, Macassars, and Boetons, are so firmly persuaded that they have relations of the crocodile species in the rivers of their own country, that they perform a periodical ceremony in remembrance of them. Large parties of them go out in a boat, furnished with great plenty of provisions, and all kinds of music, and row backwards and forwards, in places where crocodiles and allegators are most common, singing and weeping by turns, each invoking his kindred, till a crocodile appears, when the music instantly stops, and provisions, betele, and tobacco are thrown into the water. By this civility to the species, they hope to recommend themselves to their relations at home ; and that it will be accepted instead of offerings immediately to themselves, which it is not in their power to pay.

In the next rank to the Indians stand the Chinese, who in this place are numerous, but possess very little property ; many of them live within the walls, and keep shops. The fruit-sellers of Passar Pissang have been mentioned already ; but others have a rich show of European and Chinese goods :
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the far greater part however live in a quarter by themselves, without the walls, called Campang China. Many of them are carpenters, joiners, smiths, taylors, slipper makers, dyers of cotton, and embroiderers; maintaining the character of industry that is universally given of them: and some are scattered about the country, where they cultivate gardens, sow rice and sugarcane, or keep cattle and buffaloes, whose milk they bring daily to town.

There is nothing clean or dirty, honest or dishonest, provided there is not too much danger of a halter, that the Chinese will not readily do for money. But though they work with great diligence, and patiently undergo any degree of labour; yet no sooner have they laid down their tools than they begin to game, either at cards or dice, or some other play among the multitude that they have invented, which are altogether unknown in Europe: to this they apply with such eagerness, as scarcely to allow time for the necessary refreshments of food and sleep; so that it is as rare to see a Chinese idle, as it is to see a Dutchman or an Indian employed.

In manners they are always civil, or rather obsequious; and in dress they are remarkably neat and clean, to whatever rank of life they belong. I shall not attempt a description either of their persons or habits, for the better kind of China paper, which is now common in England, exhibits a perfect representation of both, though perhaps with some slight exaggerations approaching towards the caricatura.

In eating they are easily satisfied, though the few that are rich have many savory dishes. Rice, with a small proportion of flesh or fish, is the food of the poor; and they have greatly the advantage of the Mahometan Indians, whose religion forbids them to eat of many things which they could most easily procure. The Chinese, on the contrary, being
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under no restraint, eat, besides pork, dogs, cats, frogs, lizards, serpents of many kinds, and a great variety of sea animals, which the other inhabitants of this country do not consider as food: they eat also many vegetables, which an European, except he was perishing with hunger, would never touch.

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The Chinese have a singular superstition with regard to the burial of their dead; for they will upon no occasion open the ground a second time, where a body has been interred. Their burying grounds, therefore, in the neighbourhood of Batavia, cover many hundred acres, and the Dutch, grudging the waste of so much land, will not sell any for this purpose but at the most exorbitant price. The Chinese, however, contrive to raise the purchase money, and afford another instance of the folly and weakness of human nature, in transferring a regard for the living to the dead, and making that the object of solicitude and expence, which cannot receive the least benefit from either. Under the influence of this universal prejudice, they take an uncommon method to preserve the body intire, and prevent the remains of it from being mixed with the earth that surrounds it. They inclose it in a large thick coffin of wood, not made of planks joined together, but hollowed out of the solid timber like a canoe; this being covered, and let down into the grave, is surrounded with a coat of their mortar, called Chinam, about eight or ten inches thick, which in a short time becomes as hard as a stone. The relations of the deceased attend the funeral ceremony, with a considerable number of women that are hired to weep: it might reasonably be supposed that the hired appearance of sorrow could no more flatter the living than benefit the dead; yet the appearance of sorrow is known to be hired among people much more reflective and enlightened than the Chinese. In Batavia, the law re-

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quires that every man should be buried according to his rank, which is in no case dispensed with; so that if the deceased has not left sufficient to pay his debts, an officer takes an inventory of what was in his possession when he died, and out of the produce buries him in the manner prescribed, leaving only the overplus to his creditors. Thus in many instances are the living sacrificed to the dead, and money that should discharge a debt, or feed an orphan, lavished in idle processions, or deposited in the earth to rot.

Another numerous class among the inhabitants of this country is the slaves; for by slaves the Dutch, Portuguese, and Indians, however different in their rank or situation, are constantly attended: they are purchased from Sumatra, Malacca, and almost all the eastern islands. The natives of Java, very few of whom, as I have before observed, live in the neighbourhood of Batavia, have an exemption from slavery under the sanction of very severe penal laws, which I believe are seldom violated. The price of these slaves is from ten to twenty pounds sterling; but girls, if they have beauty, sometimes fetch a hundred. They are a very lazy set of people; but as they will do but little work, they are content with a little victuals, subsisting altogether upon boiled rice, and a small quantity of the cheapest fish. As they are natives of different countries, they differ from each other extremely, both in person and disposition. The African negroes, called here *Papua*, are the worst, and consequently may be purchased for the least money: they are all thieves, and all incorrigible. Next to these are the Bougis and Macassars, both from the island of Celebes; these are lazy in the highest degree, and though not so much addicted to theft as the negroes, have a cruel and vindictive spirit, which renders them extremely dangerous; especially as, to gratify their
resentment,

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repentment, they will make no scruple of sacrificing life. The best slaves, and consequently the dearest, are procured from the island of Bali: the most beautiful women from Nias, a small island on the coast of Sumatra; but they are of a tender and delicate constitution, and soon fall a sacrifice to the unwholesome air of Batavia. Besides these, there are Malays, and slaves of several other denominations, whose particular characteristics I do not remember.

These slaves are wholly in the power of their masters with respect to any punishment that does not take away life; but if a slave dies in consequence of punishment, though his death should not appear to have been intended, the master is called to a severe account, and he is generally condemned to suffer capitally. For this reason the master seldom inflicts punishment upon the slave himself, but applies to an officer called a Marineu, one of whom is stationed in every district. The duty of the Marineu is to quell riots, and take offenders into custody; but more particularly to apprehend runaway slaves, and punish them for such crimes as the master, supported by proper evidence, lays to their charge: the punishment however is not inflicted by the Marineu in person, but by slaves who are bred up to the business. Men are punished publicly, before the door of their master's house; but women within it. The punishment is by stripes, the number being proportioned to the offence; and they are given with rods made of rattans, which are split into slender twigs for the purpose, and fetch blood at every stroke. A common punishment costs the master a rixdollar, and a severe one a duatoon, about six shillings and eight pence. The master is also obliged to allow the slave three dubbelcheys, equal to about seven pence half-penny a week, as an encouragement, and to prevent his being under temptations to steal too strongly to be resisted.

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Concerning the government of this place I can say but little. We observed however a remarkable subordination among the people. Every man who is able to keep house has a certain specific rank acquired by the length of his services to the company; the different ranks which are thus acquired are distinguished by the ornaments of the coaches and the dresses of the coachmen: some are obliged to ride in plain coaches, some are allowed to paint them in different manners and degrees, and some to gild them. The coachman also appears in clothes that are quite plain, or more or less adorned with lace.

The officer who presides here has the title of Governor General of the Indies, and the Dutch Governors of all the other settlements are subordinate to him, and obliged to repair to Batavia that he may pass their accounts. If they appear to have been criminal, or even negligent, he punishes them by delay, and detains them during pleasure, sometimes one year, sometimes two years, and sometimes three; for they cannot quit the place till he gives them a dismissal. Next to the Governor are the members of the council, called here *Edele Heeren*, and by the corruption of the English, *Idoleers*. These Idoleers take upon them so much state that whoever meets them in a carriage, is expected to rise up and bow, then to drive on one side of the road, and there stop till they are past: the same homage is required also to their wives and even their children; and it is commonly paid them by the inhabitants. But some of our Captains have thought so slavish a mark of respect beneath the dignity which they derived from the service of his Britannic Majesty, and have refused to pay it; yet, if they were in a hired carriage, nothing could deter the coachman from honouring the Dutch Grandee at their expence, but the most peremptory menace of immediate death.

Justice

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Justice is administered here by a body of lawyers, who have ranks of distinction among themselves. Concerning their proceedings in questions of property, I know nothing; but their decisions in criminal cases seem to be severe with respect to the natives, and lenient with respect to their own people, in a criminal degree. A Christian always is indulged with an opportunity of escaping before he is brought to a trial, whatever may have been his offence; and if he is brought to a trial and convicted, he is seldom punished with death: while the poor Indians on the contrary are hanged, and broken upon the wheel, and even impaled alive without mercy.

The Malays and Chinese have judicial officers of their own, under the denominations of Captains and Lieutenants, who determine in civil cases, subject to an appeal to the Dutch court.

The taxes paid by these people to the Company are very considerable; and that which is exacted of them for liberty to wear their hair, is by no means the least. They are paid monthly, and to save the trouble and charge of collecting them, a flag is hoisted upon the top of a house in the middle of the town when a payment is due, and the Chinese have experienced that it is their interest to repair thither with their money without delay.

The money current here consists of ducats, worth a hundred and thirty-two stivers; ducatoons, eighty stivers; imperial rixdollars, sixty; rupees of Batavia, thirty; schellings, six; double cheys, two stivers and a half; and doits, one fourth of a stiver. Spanish dollars, when we were here, were at five shillings and five pence; and we were told, that they were never lower than five shillings and four pence, even at
2 the

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the Company's warehouse. For English guineas we could never get more than nineteen shillings upon an average; for though the Chinese would give twenty shillings for some of the brightest, they would give no more than seventeen shillings for those that were much worn.

It may perhaps be of some advantage to strangers to be told that there are two kinds of coin here, of the same denomination, milled and unmilled, and that the milled is of most value. A milled ducatoon is worth eighty stivers; but an unmilled ducatoon is worth no more than seventy-two. All accounts are kept in rixdollars and stivers, which, here at least, are mere nominal coins, like our pound sterling. The rixdollar is equal to forty-eight stivers, about four shillings and six pence English currency.

C H A P. XV.

*The Passage from Batavia to the Cape of Good Hope :
Some Account of Prince's Island and its Inhabitants, and
a comparative View of their Language with the Malay
and Javanese.*

ON Thursday the 27th of December, at six o'clock in the morning, we weighed again and stood out to sea. After much delay by contrary winds, we weathered Pulo Pare on the 29th, and stood in for the main; soon after we fetched a small island under the main, in the midway between Batavia and Bantam, called Maneater's Island. The next day, we weathered first Wapping Island, and then Pulo Babi. On the 31st, we stood over to the Sumatra shore; and on the morning of New Year's day, 1771, we stood over for the Java shore.

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Thursday 27.
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Monday 31.
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Tuesday 1.

We continued our course as the wind permitted us till three o'clock in the afternoon of the 5th, when we anchored under the south east side of Prince's Island in eighteen fathom, in order to recruit our wood and water, and procure refreshments for the sick, many of whom were now become much worse than they were when we left Batavia. As soon as the ship was secured, I went ashore, accompanied by Mr. Banks and Dr. Solander, and we were met upon the beach by some Indians who carried us immediately to a man, who, they said, was their King. After we had exchanged a few compliments with his Majesty, we proceeded to business; but
in

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Saturday 5.

in settling the price of turtle we could not agree: this however did not discourage us, as we made no doubt but that we should buy them at our own price in the morning. As soon as we parted, the Indians dispersed, and we proceeded along the shore in search of a watering-place. In this we were more successful; we found water very conveniently situated, and, if a little care was taken in filling it, we had reason to believe that it would prove good. Just as we were going off, some Indians, who remained with a canoe upon the beach, sold us three turtle; but exacted a promise of us that we should not tell the King.

Sunday 6.

The next morning, while a party was employed in filling water, we renewed our traffic for turtle: at first, the Indians dropped their demands slowly, but about noon, they agreed to take the price that we offered, so that before night we had turtle in plenty: the three that we had purchased the evening before, were in the mean time served to the ship's company, who, till the day before, had not once been served with salt provisions from the time of our arrival at Savu, which was now near four months. In the evening, Mr. Banks went to pay his respects to the King, at his palace, in the middle of a rice field, and though his Majesty was busily employed in dressing his own supper, he received the stranger very graciously.

The next day, the natives came down to the trading-place, with fowls, fish, monkeys, small deer, and some vegetables, but no turtle, for they said that we had bought them all the day before. The next day, however, more turtle appeared at market, and some were brought down every day afterwards, during our stay, though the whole, together, was not equal to the quantity that we bought the day after our arrival.

On

On the 11th, Mr. Banks having learnt from the servant whom he had hired at Batavia, that the Indians of this island had a town upon the shore, at some distance to the westward, he determined to see it: with this view he set out in the morning, accompanied by the Second Lieutenant, and as he had some reason to think that his visit would not be agreeable to the inhabitants, he told the people whom he met, as he was advancing along the shore, that he was in search of plants, which indeed was also true. In about two hours they arrived at a place where there were four or five houses, and meeting with an old man, they ventured to make some enquiries concerning the town. He said that it was far distant; but they were not to be discouraged in their enterprise, and he, seeing them proceed in their journey, joined company and went on with them. He attempted several times to lead them out of the way, but without success; and at length they came within sight of the houses. The old man then entered cordially into their party, and conducted them into the town. The name of it is Samadang, it consists of about four hundred houses, and is divided by a river of brackish water into two parts, one of which is called the old town and the other the new. As soon as they entered the old town, they met several Indians whom they had seen at the trading-place, and one of them undertook to carry them over to the new town, at the rate of two pence a head. When the bargain was made, two very small canoes were produced, in which they embarked; the canoes being placed alongside of each other, and held together, a precaution which was absolutely necessary to prevent their oversetting, the navigation was at length safely performed, though not without some difficulty; and when they landed in the new town, the people received them with great friendship, and showed them the houses of their Kings and principal people, which

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are in this district: few of them however were open, for at this time the people had taken up their residence in the rice-grounds, to defend the crop against the birds and monkeys, by which it would otherwise have been destroyed. When their curiosity was satisfied, they hired a large sailing boat for two rousees, four shillings, which brought them back to the ship time enough to dine upon one of the small deer, weighing only forty pounds, which had been bought the day before, and proved to be very good and savory meat.

We went on shore in the evening, to see how the people who were employed in wooding and watering went on, and were informed that an ax had been stolen. As the passing over this fault might encourage the commission of others of the same kind, application was immediately made to the King, who after some altercation promised that the ax should be restored in the morning; and kept his word, for it was brought to us by a man who pretended that the thief, being afraid of a discovery, had privately brought it and left it at his house in the night.

We continued to purchase between two and three hundred weight of turtle in a day, besides fowls and other necessaries; and in the evening of the 13th, having nearly completed our wood and water, Mr. Banks went ashore to take leave of his Majesty, to whom he had made several trifling presents, and at parting gave him two quires of paper, which he graciously received. They had much conversation, in the course of which his Majesty enquired, why the English did not touch there as they had been used to do. Mr. Banks replied, that he supposed it was because they found a deficiency of turtle, of which there not being enough to supply one ship, many could not be expected. To supply this defect, he advised his Majesty to breed cattle, buffaloes, and sheep,

sheep, a measure which he did not seem much inclined to adopt.

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On the 14th we made ready to sail, having on board a good stock of refreshments, which we purchased of the natives, consisting of turtle, fowl, fish, two species of deer, one as big as a sheep, the other not larger than a rabbit; with cocoa-nuts, plantains, limes, and other vegetables. The deer however served only for present use, for we could seldom keep one of them alive more than four and twenty hours after it was on board. On our part, the trade was carried on chiefly with Spanish dollars, the natives seeming to set little value upon any thing else; so that our people, who had a general permission to trade, parted with old shirts and other articles, which they were obliged to substitute for money to great disadvantage. In the morning of the 15th, we weighed, with a light breeze at N.E. and stood out to sea. Java Head, from which I took my departure, lies in latitude $6^{\circ} 49' S.$, longitude $253^{\circ} 12' W.$

Monday 14.

Tuesday 15.

Prince's Island, where we lay about ten days, is, in the Malay language, called *Pulo Selan*; and in the language of the inhabitants, *Pulo Paneitan*. It is a small island, situated in the western mouth of the Streight of Sunda. It is woody, and a very small part of it only has been cleared: there is no remarkable hill upon it, yet the English call the small eminence which is just over the landing-place the Pike. It was formerly much frequented by the India ships of many nations, but especially those of England, which of late have forsaken it, as it is said, because the water is bad; and touch either at North Island, a small island that lies on the coast of Sumatra, without the east entrance of the Streight, or at New Bay, which lies only a few leagues from Prince's Island, at neither of which places any considerable quantity

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of other refreshments can be procured. Prince's Island is, upon the whole, certainly more eligible than either of them; and though the water is brackish, if it is filled at the lower part of the brook, yet higher up it will be found excellent.

The first and second, and perhaps the third ship that comes in the season may be tolerably supplied with turtle; but those that come afterwards must be content with small ones. Those that we bought were of the green kind, and at an average cost us about a half-penny or three farthings a pound. We were much disappointed to find them neither fat nor well flavoured; and we imputed it to their having been long kept in crawls or pens of brackish water, without food. The fowls are large, and we bought a dozen of them for a Spanish dollar, which is about five pence a piece: the small deer cost us two pence a piece, and the larger, of which two only were brought down, a rupee. Many kinds of fish are to be had here, which the natives sell by hand, and we found them tolerably cheap. Cocoa-nuts we bought at the rate of a hundred for a dollar, if they were picked; and if they were taken promiscuously, one hundred and thirty. Plantains we found in great plenty; we procured also some pine apples, water melons, jaccas, and pumpkins; besides rice, the greater part of which was of the mountain kind, that grows in dry land; yams, and several other vegetables, at a very reasonable rate.

The inhabitants are Javanese, whose Raja is subject to the Sultan of Bantam. Their customs are very similar to those of the Indians about Batavia; but they seem to be more jealous of their women, for we never saw any of them during all the time that we were there, except one by chance in the woods, as she was running away to hide herself. They profess the Mahometan religion, but I believe there is not a mosque

mosque in the whole island: we were among them during the fast, which the Turks call *Ramadan*, which they seemed to keep with great rigour, for not one of them would touch a morsel of victuals, or even chew their betel till sun-set.

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Their food is nearly the same as that of the Batavian Indians, except the addition of the nuts of the palm, called *Cycas circinalis*, with which, upon the coast of New Holland, some of our people were made sick, and some of our hogs poisoned.

Upon observing these nuts to be part of their food, we enquired by what means they deprived them of their deleterious quality; and they told us, that they first cut them into thin slices, and dried them in the sun, then steeped them in fresh water for three months, and afterwards, pressing out the water, dried them in the sun a second time; but we learnt that, after all, they are eaten only in times of scarcity, when they mix them with their rice to make it go farther.

The houses of their town are built upon piles, or pillars, four or five feet above the ground: upon these is laid a floor of bamboo canes, which are placed at some distance from each other, so as to leave a free passage for the air from below: the walls also are of bamboo, which are interwoven hurdlewise, with small sticks, that are fastened perpendicularly to the beams which form the frame of the building: it has a sloping roof, which is so well thatched with palm leaves, that neither the sun nor the rain can find entrance. The ground over which this building is erected, is an oblong square. In the middle of one side is the door, and in the middle between that and the end of the house, towards the left hand, is a window: a partition runs out from each end towards the middle, which, if continued, would divide the whole floor into two equal parts, longitudinally.

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ordinally, but they do not meet in the middle, so that an opening is left over-against the door; each end of the house therefore, to the right and left of the door, is divided into two rooms, like stalls in a stable, all open towards the passage from the door to the wall on the opposite side: in that next the door, to the left hand, the children sleep; that opposite to it, on the right hand, is allotted to strangers; the master and his wife sleep in the inner room on the left hand, and that opposite to it is the kitchen. There is no difference between the houses of the poor and the rich, but in the size; except that the royal palace, and the house of a man, whose name is *Gundang*, the next in riches and influence to the King, is walled with boards instead of being wattled with sticks and bamboo.

As the people are obliged to abandon the town, and live in the rice-fields at certain seasons, to secure their crops from the birds and the monkeys, they have occasional houses there for their accommodation. They are exactly the same as the houses in the town, except that they are smaller, and are elevated eight or ten feet above the ground instead of four.

The disposition of the people, as far as we could discover it, is good. They dealt with us very honestly, except, like all other Indians, and the itinerant retailers of fish in London, they asked sometimes twice, and sometimes thrice as much for their commodities as they would take. As what they brought to market, belonged, in different proportions, to a considerable number of the natives, and it would have been difficult to purchase it in separate lots, they found out a very easy expedient with which every one was satisfied: they put all that was bought of one kind, as plantains, or cocoa-nuts, together, and when we had agreed for the heap, they divided the money that was paid for it, among those
of

of whose separate property it consisted, in a proportion corresponding with their contributions. Sometimes, indeed, they changed our money, giving us 240 doits, amounting to five shillings, for a Spanish dollar, and ninety-six, amounting to two shillings, for a Bengal roupee.

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They all speak the Malay language, though they have a language of their own, different both from the Malay and the Javanese. Their own language they call *Catta Gunung*, the language of the mountains; and they say that it is spoken upon the mountains of Java, whence their tribe originally migrated, first to New Bay, and then to their present station, being driven from their first settlement by tygers, which they found too numerous to subdue. I have already observed, that several languages are spoken by the native Javanese, in different parts of their island; but when I say that the language of these people is different from the Javanese, I mean that it is different from the language which is spoken at Samarang, a place that is distant only one day's journey from the residence of the emperor of Java. The following is a list of corresponding words in the languages of Prince's Island, Java, and Malacca.

English.	Prince's Island.	Javanese.	Malay.
<i>A man,</i>	Jalma,	Oong Lanang,	Oran Lacki Lacki.
<i>A woman,</i>	Becang,	Oong Wadong,	Parampuan.
<i>A child,</i>	Oroculatacke,	Lari,	Anack.
<i>The head,</i>	Holo,	Undafs,	Capalla.
<i>The nose,</i>	Erung,	Erung,	Edung.
<i>The eyes,</i>	Mata,	Moto,	Mata.
<i>The ears,</i>	Chole,	Cuping,	Cuping.
<i>The teeth,</i>	Cutock,	Untu,	Ghigi.
<i>The belly,</i>	Beatung,	Wuttong,	Prot.
<i>The Backside,</i>	Serit,	Celit,	Pantat.

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	<i>The thigh,</i>	Pimping,	Poopoo,	Paha.
	<i>The knee,</i>	Hullootoor,	Duncul,	Lontour.
	<i>The leg,</i>	Metis,	Sickil,	Kauki.
	<i>A nail,</i>	Cucu,	Cucu,	Cucu.
	<i>A hand,</i>	Langan,	Tangan,	Tangan.
	<i>A finger,</i>	Ramo Langan,	Jari,	Jaring.

In this specimen of the languages of places so near to each other, the names of different parts of the body are chosen, because they are easily obtained from people whose language is utterly unknown, and because they are more likely to be part of the original stem of the language, than any other, as types of the first objects to which they would give names. It is very remarkable that the Malay, the Javanese, and the Prince's Island language, have words, which, if not exactly similar to the corresponding words in the language of the islands in the South Seas, are manifestly derived from the same source, as will appear from the following table:

English.	South Sea.	Malay.	Javanese.	Prince's Island.
<i>An eye,</i>	Matta,	Mata,	Moto,	Mata.
<i>To eat,</i>	Maa,	Macan,	Mangan.	
<i>To drink,</i>	Einu,	Menu,	Gnumbe.	
<i>To kill,</i>	Matte,	Matte,	Matte.	
<i>A louse,</i>	Outou,	Coutou.		
<i>Rain,</i>	Euwa,	Udian,	Udan.	
<i>Bamboo cane,</i>	Owhe,			Awe.
<i>A breast,</i>	Eu,	Soufou,	Soufou.	
<i>A bird,</i>	Mannu,		Mannu,	Mannuck.
<i>A fish,</i>	Eyca,	Ican,	Iwa.	
<i>The foot,</i>	Tapao,		Tapaan.	
<i>A lobster,</i>	Tooura,	Udang,	Urang.	
<i>Yams,</i>	Eufwhe,	Ubi,	Urve.	

English.	South Sea.	Malay.	Javanese.
<i>To bury,</i>	Etannou,	Tannam,	Tandour.
<i>A moschito,</i>	Enammou,	Gnammmuck.	
<i>To scratch,</i>	Hearu,	Garru,	Garu.
<i>Cocos roots,</i>	Taro,	Tallas,	Talas.
<i>In-land,</i>	Uta,	Utan.	

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This similitude is particularly remarkable in the words expressing number, which at first sight seems to be no inconsiderable proof that the science at least of these different people has a common root. But the names of numbers in the island of Madagascar, are, in some instances, similar to all these, which is a problem still more difficult to solve. That the names of numbers, in particular, are in a manner common to all these countries, will appear from the following comparative table, which Mr. Banks drew up, with the assistance of a negro slave, born at Madagascar, who was on board an English ship at Batavia, and sent to him to gratify his curiosity on this subject.

English.	S. Sea Islands.	Malay.	Javanese.	Prince's Island.	Madagascar.
<i>One,</i>	Tahie,	Satou,	Sigi,	Hegie,	Iffe.
<i>Two,</i>	Rua,	Dua,	Lorou,	Dua,	Rua.
<i>Three,</i>	Torou,	Tiga,	Tullu,	Tollu,	Tellou.
<i>Four,</i>	Haa,	Ampat,	Pappat,	Opat,	Effats.
<i>Five,</i>	Reina,	Lima,	Limo,	Limah,	Limi.
<i>Six,</i>	Wheney,	Annam,	Nunnam,	Gunnap,	Ene.
<i>Seven,</i>	Hetu,	Tudju,	Petu,	Tudju,	Titou.
<i>Eight,</i>	Waru,	Delapau,	Wolo,	Delapan,	Walou.
<i>Nine,</i>	Iva,	Sembilan,	Songo,	Salapan,	Sivi.
<i>Ten,</i>	Ahouroa,	Sapoulou,	Sapoulou,	Sapoulou,	Tourou.

In the language of Madagascar, there are other words similar to words of the same import in the Malay. The nose in Malay is called *Erung*, at Madagascar *Ourou*; *Lida*, the

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tongue, is *Lala*; *Tangan*, the hand, is *Tang*; and *Tanna*, the ground, is *Taan*.

From the similitude between the language of the Eastern Indies, and the islands of the South Sea, conjectures may be formed with respect to the peopling those countries, which cannot easily be referred to Madagascar. The inhabitants of Java and Madagascar appear to be a different race; the Javanese is of an olive complexion, and has long hair; the native of Madagascar is black, and his head is not covered with hair, but wool; and yet perhaps this will not conclude against their having common ancestors so strongly as at first appears. It does not seem less difficult to account for the personal difference between a native of England and France, as an effect of mere local situation, than for the difference between the natives of Java and Madagascar; yet it has never been supposed, that England and France were not peopled from common ancestors. If two natives of England marry in their own country, and afterwards remove to our settlements in the West Indies, the children that are conceived and born there will have the complexion and cast of countenance that distinguish the Creole; if they return, the children conceived and born afterwards, will have no such characteristics. If it be said that the mother's mind being impressed with different external objects, impresses corresponding features and complexion upon the child during her pregnancy, it will be as difficult to refer the effect into this cause, upon mere physical principles, as into the other; for it can no more be shewn how a mere idea, conceived in the mother's imagination, can change the corporeal form of her infant, than how its form can be changed by mere local situation. We know that people within the small circle of Great Britain and Ireland, who are born at the distance of two or three hundred miles from each other, will be distinguished by the Scotch face,

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face, the Welsh face, and the Irish face; may we not then reasonably suppose, that there are in nature qualities which act powerfully as efficient causes, and yet are not cognizable by any of the five modes of perception which we call senses? A deaf man, who sees the string of a harpsichord vibrate, when a corresponding tone is produced by blowing into a flute at a distance, will see an effect of which he can no more conceive the cause to exist in the blowing air into the flute, than we can conceive the cause of the personal difference of the various inhabitants of the globe to exist in mere local situation; nor can he any more form an idea of the cause itself, in one case, than we can in the other: what happens to him then, in consequence of having but four senses instead of five, may, with respect to many phenomena of nature, happen to us, in consequence of having but five senses instead of six, or any greater number.

Possibly, however, the learning of ancient Ægypt might run in two courses, one through Africa, and the other through Asia, disseminating the same words in each, especially terms of number, which might thus become part of the language of people who never had any communication with each other.

We now made the best of our way for the Cape of Good Hope, but the seeds of disease which we had received at Batavia began to appear with the most threatening symptoms in dysenteries and slow fevers. Lest the water which we had taken in at Prince's Island should have had any share in our sickness, we purified it with lime, and we washed all parts of the ship between decks with vinegar, as a remedy against infection. Mr. Banks was among the sick, and for some time there was no hope of his life. We were very soon in a most deplorable situation; the ship was nothing better than

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an hospital, in which those that were able to go about, were too few to attend the sick, who were confined to their hammocks; and we had almost every night a dead body to commit to the sea. In the course of about six weeks, we buried Mr. Sporing, a gentleman who was in Mr. Banks's retinue, Mr. Parkinson, his natural history painter, Mr. Green the astronomer, the boatswain, the carpenter and his mate, Mr. Monkhouse the midshipman, who had fothered the ship after she had been stranded on the coast of New Holland, our old jolly sail-maker and his assistant, the ship's cook, the corporal of the marines, two of the carpenter's crew, a midshipman, and nine seamen; in all three and twenty persons, besides the seven that we buried at Batavia.

C H A P. XVI.

Our Arrival at the Cape of Good Hope; some Remarks on the Run from Java Head to that Place; a Description of the Cape, and of Saint Helena: With some Account of the Hottentots, and the Return of the Ship to England.

ON Friday the 15th of March, about ten o'clock in the morning, we anchored off the Cape of Good Hope, in seven fathom with an ouzey bottom. The west point of the bay, called the Lion's Tail, bore W. N. W. and the castle S. W. distant about a mile and a half. I immediately waited upon the Governor, who told me that I should have every thing the country afforded. My first care was to provide a proper place ashore for the sick, which were not a few; and a house was soon found, where it was agreed they should be lodged and boarded at the rate of two shillings a head per day.

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Our run from Java head, to this place, afforded very few subjects of remark that can be of use to future navigators; such as occurred, however, I shall set down. We had left Java Head eleven days before we got the general south east trade-wind, during which time, we did not advance above 5° to the southward, and 3° to the west, having variable light airs, interrupted by calms, with sultry weather, and an unwholesome air, occasioned probably by the load of vapours which the eastern trade-wind, and westerly monsoons, bring into these latitudes, both which blow in these seas at the time of year when we happened to be there. The east-

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erly wind prevails as far as 10 or 12° S. and the westerly as far as 6 or 8° ; in the intermediate space the winds are variable, and the air, I believe, always unwholesome; it certainly aggravated the diseases which we brought with us from Batavia, and particularly the flux, which was not in the least degree checked by any medicine, so that whoever was seized with it, considered himself as a dead man; but we had no sooner got into the trade-wind, than we began to feel its salutary effects: we buried indeed several of our people afterwards, but they were such as had been taken on board in a state so low and feeble that there was scarcely a possibility of their recovery. At first we suspected that this dreadful disorder might have been brought upon us by the water that we took on board at Prince's Island, or even by the turtle that we bought there; but there is not the least reason to believe that this suspicion was well grounded, for all the ships that came from Batavia at the same season, suffered in the same degree, and some of them even more severely, though none of them touched at Prince's Island in their way.

A few days after we left Java, we saw boobies about the ship for several nights successively, and as these birds are known to roost every night on shore, we thought them an indication that some island was not far distant; perhaps it might be the island of Selam, which, in different charts, is very differently laid down both in name and situation.

The variation of the compass off the west coast of Java is about 3° W. and so it continued without any sensible variation, in the common track of ships to the longitude of 288° W. latitude 22° S. after which it increased apace, so that in longitude 295° , latitude 23° , the variation was $10^{\circ} 20'$ W.: in seven degrees more of longitude, and one of latitude, it increased.

creased two degrees; in the same space, farther to the west, it increased five degrees: in latitude 28° , longitude 314° , it was $24^{\circ} 20'$, in latitude 29° longitude 317° , it was $26^{\circ} 10'$, and was then stationary for the space of about ten degrees farther to the west; but in latitude 34° , longitude 333° , we observed it twice to be $28^{\circ} \frac{1}{4}$ W. and this was its greatest variation; for in latitude $35^{\circ} \frac{1}{2}$, longitude 337° , it was 24° , and continued gradually to decrease; so that off Cape Anguillas it was $22^{\circ} 30'$, and in Table Bay $20^{\circ} 30'$ W..

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As to currents it did not appear that they were at all considerable, till we came within a little distance of the meridian of Madagascar; for after we had made 52° of longitude from Java Head, we found, by observation, that our error in longitude was only two degrees, and it was the same when we had made only nineteen. This error might be owing partly to a current setting to the westward, partly to our not making proper allowances for the setting of the sea before which we run, and perhaps to an error in the assumed longitude of Java Head. If that longitude is erroneous, the error must be imputed to the imperfection of the charts of which I made use in reducing the longitude from Batavia, to that place, for there can be no doubt but that the longitude of Batavia is well determined. After we had passed the longitude of 307° , the effects of the westerly currents began to be considerable; for in three days, our error in longitude was $1^{\circ} 5'$: the velocity of the current kept increasing, as we proceeded to the westward, in so much that for five days successively after we made the land, we were driven to the S. W. or S. W. by W. not less than twenty leagues a day; and this continued till we were within sixty or seventy leagues of the Cape, where the current set sometimes one way, and sometimes the other, though inclining rather to the westward.

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March.

Friday 15.

After the boobies had left us, we saw no more birds till we got nearly abreast of Madagascar, where, in latitude $27^{\circ} \frac{3}{4}$ S. we saw an albatross, and after that time we saw them every day in great numbers, with birds of several other sorts, particularly one about as big as a duck, of a very dark brown colour, with a yellowish bill. These birds became more numerous as we approached the shore, and as soon as we got into soundings we saw gannets, which we continued to see as long as we were upon the bank which stretches off Anguillas to the distance of forty leagues, and extends along the shore to the eastward, from Cape False, according to some charts, one hundred and sixty leagues: The real extent of this bank is not exactly known; it is however useful as a direction to shipping when to haul in, in order to make the land.

While we lay here, the Houghton Indiaman failed for England, who, during her stay in India, lost by sickness between thirty and forty men; and when she left the Cape had many in a helpless condition with the scurvy. Other ships suffered in the same proportion, who had been little more than twelve months absent from England; our sufferings therefore were comparatively light, considering that we had been absent near three times as long.

April.

Saturday 13.

Sunday 14.

Having lain here to recover the sick, procure stores, and perform several necessary operations upon the ship and rigging, till the 13th of April, I then got all the sick on board, several of whom were still in a dangerous state, and having taken leave of the Governor, I unmoored the next morning, and got ready to sail.

The Cape of Good Hope has been so often described, and is so well known in Europe, that I shall mention only a few particulars,

particulars, which in other relations are omitted or misrepresented.

1771.
April.

Notwithstanding all that has been said to the contrary, no country that we saw during the voyage makes a more forlorn appearance, or is in reality a more sterile desert. The land over the Cape, which constitutes the peninsula formed by Table Bay on the north, and False Bay on the south, consists of high mountains, altogether naked and desolate: the land behind these to the east, which may be considered as the isthmus, is a plain of vast extent, consisting almost wholly of a light kind of sea sand, which produces nothing but heath, and is utterly incapable of cultivation. All the spots that will admit of improvement, which together bear about the same proportion to the whole as one to one thousand, are laid out in vineyards, orchards, and kitchen grounds; and most of these little spots lie at a considerable distance from each other. There is also the greatest reason to believe, that in the interior parts of this country, that which is capable of cultivation does not bear a greater proportion to that which is incorrigibly barren; for the Dutch told us, that they had settlements eight and twenty days journey up the country, a distance equal to at least nine hundred miles, from which they bring provisions to the Cape by land; so that it seems reasonable to conclude that provisions are not to be had within a less compass. While we were at the Cape, a farmer came thither from the country, at the distance of fifteen days journey, and brought his young children with him. We were surprised at this, and asked him, if it would not have been better to have left them with his next neighbour: Neighbour! said the man, I have no neighbour within less than five days journey of me. Surely the country must be deplorably barren in which those who settle only to raise

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April.

provisions for a market, are dispersed at such distances from each other. That the country is every where destitute of wood appears to demonstration; for timber and planks are imported from Batavia, and fuel is almost as dear as food. We saw no tree, except in plantations near the town, that was six feet high; and the stems, that were not thicker than a man's thumb, had roots as thick as an arm or a leg, such is the influence of the winds here to the disadvantage of vegetation, setting the sterility of the soil out of the question.

The only town which the Dutch have built here is, from its situation, called Cape Town, and consists of about a thousand houses, neatly built of brick, and in general whited on the outside; they are however covered only with thatch, for the violence of the south east winds would render any other roof inconvenient and dangerous. The streets are broad and commodious, all crossing each other at right angles. In the principal street there is a canal, on each side of which is planted a row of oaks, that have flourished tolerably well, and yield an agreeable shade: there is a canal also in one other part of the town, but the slope of the ground in the course of both is so great, that they are furnished with flood-gates, or locks, at intervals of little more than fifty yards.

A much greater proportion of the inhabitants are Dutch in this place than in Batavia; and as the town is supported principally by entertaining strangers, and supplying them with necessaries, every man, to a certain degree, imitates the manners and customs of the nation with which he is chiefly concerned. The ladies however are so faithful to the mode of their country, that not one of them will stir without a chaudpied or chauffet, which is carried by a servant that it may be ready to place under her feet whenever she shall sit down. This practice is the more remarkable, as very few of
these

these chauffets have fire in them, which indeed the climate renders unnecessary.

1770.
April.

The women in general are very handsome; they have fine clear skins, and a bloom of colour that indicates a purity of constitution, and high health. They make the best wives in the world, both as mistresses of a family and mothers; and there is scarcely a house that does not swarm with children.

The air is salutary in a high degree; so that those who bring diseases hither from Europe, generally recover perfect health in a short time; but the diseases that are brought from India are not so certainly cured.

Notwithstanding the natural sterility of the climate, industry has supplied this place with all the necessaries, and even the luxuries of life in the greatest profusion. The beef and mutton are excellent, though the cattle and sheep are natives of the country; the cattle are lighter than ours, more neatly made, and have horns that spread to a much wider extent. The sheep are clothed with a substance between wool and hair, and have tails of an enormous size; we saw some that weighed twelve pounds, and were told that there were many much larger. Good butter is made of the milk of the cows, but the cheese is very much inferior to our own. Here are goats, but they are never eaten, hogs, and a variety of poultry. Hares are also found here, exactly like those of Europe; antelopes of many kinds, quails of two sorts, and bustards, which are well flavoured, but not juicy. The fields produce European wheat and barley, and the gardens European vegetables, and fruit of all kinds, besides plantains, guavas, jambu, and some other Indian fruits, but these are not in perfection; the plantains in particular, are very bad, and the guavas no larger than gooseberries. The vineyards also produce wine of various sorts, but not equal to those of Europe, ex-

1771.
April.

cept the *Constantia*, which is made genuine only at one vineyard, about ten miles distant from the town. There is another vineyard near it, where wine is made that is called by the same name, but it is greatly inferior.

The common method in which strangers live here, is to lodge and board with some of the inhabitants, many of whose houses are always open for their reception: the rates are from five shillings to two shillings a day, for which all necessaries are found. Coaches may be hired at four and twenty shillings a day, and horses at six shillings; but the country affords very little temptation to use them. There are no public entertainments; and those that are private, to which strangers of the rank of Gentlemen are always admitted, were suspended while we were there by the breaking out of the measles.

At the farther end of the High-street, the Company have a garden, which is about two thirds of an English mile long; the whole is divided by walks that intersect each other at right angles, and are planted with oaks that are clipped into wall hedges, except in the center walk, where they are suffered to grow to their full size, and afford an agreeable shade, which is the more welcome, as, except the plantations by the sides of the two canals, there is not a single tree that would serve even for a shepherd's bush, within many miles of the town. The greater part of this garden is kitchen ground; but two small squares are allotted to botanical plants, which did not appear to be so numerous by one half as they were when Oldenland wrote his catalogue. At the farther end of the garden is a menagerie, in which there are many birds and beasts that are never seen in Europe; particularly a beast called by the Hottentots *Coe Doe*, which is as large as a horse, and has the fine spiral horns which
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are sometimes seen in private and public collections of curiosities.

1771.
April.

Of the natives of this country, we could learn but little except from report; for there were none of their habitations, where alone they retain their original customs, within less than four days journey from the town; those that we saw at the Cape were all servants to Dutch farmers, whose cattle they take care of, and are employed in other drudgery of the meanest kind. These are in general of a slim make, and rather lean than plump, but remarkably strong, nimble, and active. Their size is nearly the same with that of Europeans, and we saw some that were six feet high: their eyes are dull and without expression: their skins are of the colour of soot, but that is in a great measure caused by the dirt, which is so wrought into the grain that it cannot be distinguished from complexion; for I believe they never wash any part of their bodies. Their hair curls strongly, not like a negroe's, but falls in ringlets about seven or eight inches long. Their clothing consists of a skin, generally that of a sheep, thrown over their shoulders; besides which, the men wear a small pouch in the middle of the waist, and the women, a broad leather flap, both which hang from a girdle or belt that is adorned with beads and small pieces of copper. Both men and women wear necklaces, and sometimes bracelets, of beads; and the women wear rings of hard leather round their ancles, to defend them from the thorns, with which their country every where abounds: some of them have a sandal, made of wood or bark; but the greater part of them are unshod.

To a European, their language appears to be scarcely articulate; besides which it is distinguished by a very remarkable singularity. At very frequent intervals, while they are speaking,

1775.
April.

speaking, they cluck with the tongue against the roof of the mouth: these clucks do not appear to have any meaning, but rather to divide what they say into sentences. Most of these Hottentots speak Dutch, without any peculiarity of pronunciation.

They are all modest, even to sheepishness; for it was not without the greatest difficulty that we could persuade any of them to dance, or even to speak in their own language to each other, in our presence. We did however both see them dance, and hear them sing; their dances are by turns active and sluggish to excess; sometimes consisting of quick and violent motions, with strange distortions of the body, and unnatural leaps backwards and forwards, with the legs crossing each other; and being sometimes so spiritless that the dancer only strikes the ground first with one foot and then with the other, neither changing place nor moving any other part of his body: the songs also are alternately to quick and slow movements, in the same extremes as the dance.

We made many enquiries concerning these people of the Dutch, and the following particulars are related upon the credit of their report:

Within the boundaries of the Dutch settlements there are several nations of these people, who very much differ from each other in their customs and manner of life: all however are friendly and peaceable, except one clan that is settled to the eastward, which the Dutch call *Bosch men*, and these live entirely by plunder, or rather by theft; for they never attack their neighbours openly, but steal the cattle privately in the night. They are armed however to defend themselves, if they happen to be detected, with lances or assegays, and arrows, which they know how to poison by various ways, some with the juice of herbs, and some with the ve-

nom

nom of the serpent called *Cobra di Capelo*; in the hands of these people a stone also is a very formidable weapon, for they can throw it with such force and exactness as repeatedly to hit a dollar at the distance of a hundred paces. As a defence against these freebooters, the other Indians train up bulls, which they place round their towns in the night, and which, upon the approach of either man or beast, will assemble and oppose them, till they hear the voice of their masters encouraging them to fight, or calling them off, which they obey with the same docility as a dog.

1771.
April.

Some nations have the art of melting and preparing copper, which is found among them, probably native; and of this they make broad plates, which they wear as ornaments upon their foreheads. Some of them also know how to harden bits of iron, which they procure from the Dutch, and form into knives, so as to give them a temper superior to that of any they can buy.

The Chiefs, many of whom are possessors of very numerous herds of cattle, are generally clad in the skins of lions, tygers, or zebras, to which they add fringes, and other ornaments in a very good taste. Both sexes frequently anoint the body with grease, but never use any that is rancid or foetid, if fresh can be had. Mutton suet and butter are generally used for this purpose; butter is preferred, which they make by shaking the milk in a bag made of the skin of some beast.

We were told that the priest certainly gives the nuptial benediction by sprinkling the bride and bridegroom with his urine. But the Dutch universally declared that the women never wrapped the entrails of sheep round their legs, as they have been said to do, and afterwards make them part of their food. Semicastration was also absolutely denied to be general;

1771.
April.

general; but it was acknowledged that some among the particular nation which knew how to melt copper had suffered that operation, who were said to be the best warriors, and particularly to excel in the art of throwing stones.

We were very desirous to determine the great question among natural historians, whether the women of this country have or have not that fleshy flap or apron which has been called the *Sinus pudoris*, and what we learnt I shall relate. Many of the Dutch and Malays, who said they had received favours from Hottentots women, positively denied its existence; but a physician of the place declared that he had cured many hundreds of venereal complaints, and never saw one without two fleshy, or rather skinny appendages, proceeding from the upper part of the *Labia*, in appearance somewhat resembling the teats of a cow, but flat; they hung down, he said, before the *Pudendum*, and were in different subjects of different lengths, in some not more than half an inch, in others three or four inches: these he imagined to be what some writers have exaggerated into a flap, or apron, hanging down from the bottom of the abdomen, of sufficient extent to render an artificial covering of the neighbouring parts unnecessary.

Thus much for the country, its productions, and inhabitants. The bay is large, safe, and commodious; it lies open indeed to the north west winds, but they seldom blow hard; yet as they sometimes send in a great sea, the ships moor N. E. and S. W. so as to have an open hawser with north west winds: the south east winds blow frequently with great violence, but as this direction is right out of the bay, they are not dangerous. Near the town a wharf of wood is run out to a proper distance for the convenience of landing and shipping goods. To this wharf water is conveyed in pipes, from which
several

several boats may fill water at the same time; and several large boats or hoys are kept by the Company to carry stores and provisions to and from the shipping in the harbour. The bay is defended by a square fort, situated close to the beach on the east side of the town, and by several outworks and batteries extending along the shore, as well on this side of the town as the other; but they are so situated as to be cannonaded by shipping, and are in a manner defenceless against an enemy of any force by land. The garrison consists of eight hundred regular troops, besides militia of the country, in which is comprehended every man able to bear arms. They have contrivances to alarm the whole country by signals in a very short time, and the militia is then to repair immediately to the town.

1771.
April.

The French at Mauritius are supplied from this place with salted beef, biscuit, flour, and wine: the provisions for which the French contracted this year were 500,000 lb. weight of salt beef, 400,000 lb. of flour, 400,000 lb. of biscuit, and 1,200 leaguers of wine.

In the morning of the 14th, we weighed and stood out of the bay; and at five in the evening anchored under Penquin, or Robin Island: we lay here all night, and as I could not sail in the morning for want of wind, I sent a boat to the island for a few trifling articles which we had forgot to take in at the Cape. But as soon as the boat came near the shore, the Dutch hailed her, and warned the people not to land at their peril, bringing down at the same time six men armed with musquets, who paraded upon the beach. The officer who commanded the boat not thinking it worth while to risk the lives of the people on board for the sake of a few cabbages, which were all we wanted, returned to the ship. At first we were at a loss to account for our repulse, but we

Sunday 14.

1771.
April.
Sunday 14.

afterwards recollected, that to this island the Dutch at the Cape banish such criminals as are not thought worthy of death, for a certain number of years, proportioned to the offence; and employ them as slaves in digging lime-stone, which though scarce upon the continent is plenty here: and that a Danish ship, which by sickness had lost great part of her crew, and had been refused assistance at the Cape, came down to this island, and sending her boat ashore, secured the guard, and took on board as many of the criminals as she thought proper to navigate her home: we concluded therefore that the Dutch, to prevent the rescue of their criminals in time to come, had given order to their people here to suffer no boat of any foreign nation to come ashore.

Thursday 25. On the 25th, at three o'clock in the afternoon, we weighed, with a light breeze at S. E. and put to sea. About an hour afterwards, we lost our Master, Mr. Robert Mollineux, a young man of good parts, but unhappily given up to intemperance, which brought on disorders that put an end to his life.

Monday 29. We proceeded in our voyage homeward without any remarkable incident; and in the morning of the 29th, we crossed our first meridian, having circumnavigated the globe in the direction from east to west, and consequently lost a day, for which we made an allowance at Batavia.

May.
Wednes. 1.

At day-break, on the 1st of May, we saw the island of St. Helena; and at noon, we anchored in the road before James's fort.

We staid here till the 4th, to refresh, and Mr. Banks improved the time in making the complete circuit of the island, and visiting the most remarkable places upon it.

It is situated as it were in the middle of the vast Atlantic ocean, being four hundred leagues distant from the coast of Africa, and six hundred from that of America. It is the summit of an immense mountain rising out of the sea, which, at a little distance all round it, is of an unfathomable depth, and is no more than twelve leagues long, and six broad.

1771.
May.
Wednes. 1.

The seat of volcanoes has, without exception, been found to be the highest part of the countries in which they are found. *Ætna* and *Vesuvius* have no land higher than themselves, in their neighbourhood; *Hecla* is the highest hill in Iceland; volcanoes are frequent in the highest part of the Andes in South America; and the pike of *Teneriffe* is known to be the covering of subterraneous fire: these are still burning, but there are innumerable other mountains which bear evident marks of fire that is now extinct, and has been so from the time of our earliest traditions: among these is *Saint Helena*, where the inequalities of the ground, in its external surface, are manifestly the effect of the sinking of the earth, for the opposite ridges, though separated always by deep, and sometimes by broad vallies, are exactly similar both in appearance and direction; and that the sinking of the earth in these parts, was caused by subterraneous fire, is equally manifest from the stones, for some of them, especially those in the bottom of the vallies, are burnt almost to a cinder: in some there are small bubbles, like those that are seen in glass which has been urged almost to fusion, and some, though at first sight they do not appear to have been exposed to the action of great heat, will be found, upon a closer inspection, to contain small pieces of extraneous bodies, particularly mundick, which have yielded to the power of fire, though it was not sufficient to alter the appearance of the stone which contained them.

1771.
May.
Wednes. 1.

It appeared, as we approached it on the windward side, like a rude heap of rocks, bounded by precipices of amazing height, and consisting of a kind of half friable stone, which shows not the least sign of vegetation; nor is it more promising upon a nearer view: in sailing along the shore, we came so near the huge cliffs, that they seemed to over-hang the ship, and the tremendous effect of their giving way, made us almost fear the event: at length we opened a valley, called Chappel Valley, which resembles a large trench; and in this valley we discovered the town. The bottom of it is slightly covered with herbage, but the sides are as naked as the cliffs that are next the sea. Such is the first appearance of the island in its present cultivated state, and the first hills must be passed before the vallies look green, or the country displays any other marks of fertility.

The town stands just by the sea side, and the far greater part of the houses are ill built; the church, which originally was a mean structure, is in ruins, and the market-house is nearly in the same condition.

The white inhabitants are all English, who, as they are not permitted by the East India Company, to whom the island belongs, to carry on any trade or commerce on their own account, subsist wholly by supplying such ships as touch at the place with refreshments, which, however, they do not provide in proportion to the fertility of the soil, and the temperament of the climate, which would enable them, by cultivation, to produce all the fruits and vegetables both of Europe and India. This island indeed, small as it is, enjoys the different advantages of different climates, for the cabbage trees which grow upon the highest ridges, can by no art be cultivated upon the ridges next below, where the red-wood and gum-wood both flourish, which will not grow
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upon the ridges above, and neither of the three are to be found in the vallies, which, in general, are covered with European plants, and the more common ones of India.

1771.
May.
Wednes. 11.

Here are a few horses, but they are kept only for the saddle, so that all labour is performed by slaves; nor are they furnished with any of the various machines which art has invented to facilitate their task. The ground is not every where too steep for a cart, and where it is, the wheelbarrow might be used with great advantage, yet there is no wheelbarrow in the whole island; every thing is conveyed from place to place by the slaves, and they are not furnished even with the simple convenience of a porter's knot, but carry their burden upon their heads. They are indeed very numerous, and are brought from almost every part of the world; but they appeared to be a miserable race, worn out partly by excessive labour, and partly by ill usage, of which they frequently complained; and I am sorry to say, that instances of wanton cruelty are much more frequent among my countrymen here, than among the Dutch, who are, and perhaps not without reason, generally reproached with want of humanity at Batavia and the Cape.

Among the native products of this island, which are not numerous, must be reckoned ebony, though the trees are now nearly extinct, and are not remembered to have been plenty: pieces of the wood are frequently found in the vallies, of a fine black colour, and a hardness almost equal to iron: these pieces, however, are always so short and crooked, that no use can be made of them. Whether the tree is the same with that which produces ebony upon the isle of Bourbon, or the islands adjacent, is not known, as the French have not yet published any account of it.

There:

1771.
May.

Wednes. 1.

There are but few insects in this place, but there is a species of snail found upon the tops of the highest ridges, which probably has been there since the original creation of their kind, at the beginning of the world. It is indeed very difficult to conceive how any thing which was not deposited here at its creation, or brought hither by the diligence of man, could find its way to a place so severed from the rest of the world, by seas of immense extent, except the hypothesis that has been mentioned on another occasion be adopted, and this rock be supposed to have been left behind, when a large tract of country, of which it was part, subsided by some convulsion of nature, and was swallowed up in the ocean.

Saturday 4.

At one o'clock in the afternoon, of the 4th of May, we weighed and stood out of the Road, in company with the Portland man of war, and twelve sail of Indiamen.

Friday 10.

We continued to sail in company with the fleet, till the 10th in the morning, when, perceiving that we sailed much heavier than any other ship, and thinking it for that reason probable that the Portland would get home before us, I made the signal to speak with her, upon which Captain Elliot himself came on board, and I delivered to him a letter for the Admiralty, with a box, containing the common log books of the ship, and the journals of some of the officers. We con-

Thursday 23.

tinued in company, however, till the 23d in the morning, and then there was not one of the ships in sight. About one o'clock in the afternoon, died our First Lieutenant Mr. Hicks, and in the evening we committed his body to the sea, with the usual ceremonies. The disease of which he died, was a consumption, and as he was not free from it when we sailed from England, it may truly be said that he was dying during the

the whole voyage, though his decline was very gradual till we came to Batavia : the next day, I gave Mr. Charles Clerk an order to act as Lieutenant in his room, a young man who was extremely well qualified for that station.

1771.
May.
Friday 24.

Our rigging and fails were now become so bad, that something was giving way every day. We continued our course, however, in safety till the 10th of June, when land, which proved to be the Lizard, was discovered by Nicholas Young, the same boy that first saw New Zealand ; on the 11th we run up the channel, at six in the morning of the 12th we passed Beachy Head, at noon we were abreast of Dover, and about three came to an anchor in the Downs, and went ashore at Deal.

June.
Monday 10.
Tuesday 11.
Wednes. 12.

F I N I S.

