CAPTAIN GEORGE VANCOUVER'S

**VOYAGE OF DISCOVERY** 

1790 - 1795

VOLUME 6

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# VOYAGE OF DISCOVERY

TO THE

### NORTH PACIFIC OCEAN,

AND

#### ROUND THE WORLD;

In which the Coast of North-west America has been carefully examined and accurately surveyed

UNDERTAKEN

# BY HIS MAJESTY'S COMMAND,

Principally with a View to ascertain the existence of any NAVIGABLE COMMUNICATION between the

North Pacific and North Atlantic Oceans;

AND PERFORMED IN THE YEARS

1790, 1791, 1792, 1793, 1794 and 1795,

IN THE

DISCOVERY SLOOP OF WAR, AND ARMED TENDER CHATHAM,

UNDER THE COMMAND OF

CAPTAIN GEORGE VANCOUVER.

Dedicated, by Permission, to HIS MAJESTY.

A NEW EDITION, WITH CORRECTIONS,

ILLUSTRATED WITH NINETEEN VIEWS AND CHARTS.

IN SIX VOLUMES.

# VOL. VI.

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# VOYAGE

TO THE

# NORTH PACIFIC OCEAN, AND ROUND THE WORLD.

#### CHAPTER X.

Proceed to the Southward along the exterior Coast of King George the Third's Archipelago—Arrive in Port Conclusion—Transactions there—Two Boat Excursions—Complete the Survey of the Continental Shores of North-West America—Astronomical and nautical Observations.

Our attention being now directed to the survey of the exterior coast of George the Third's archipelago, at the dawn July 1794 of day, on Tuesday the 29th of July, with a fresh westerly breeze, we made sail along the shore, to the southward; cape Cross bearing by compass N. 68 E. distant four or five miles. From this cape the coast takes a direction S. 31 E. about seven leagues to another promontory, that obtained the name of CAPE EDWARD; off which lies a cluster of small islets and rocks. The coast between these capes is much broken, and has several openings in it that appeared likely to afford shelter; but the vast number of rocks and small islets, some producing trees, and others intirely barren, that extend to the distance of three or four miles from the shore, will render the entering of such harbours unpleasant and dangerous, until a more competent knowledge of their several situations may hereafter be acquired: that which appeared to be the easiest of access, lies about two leagues to the northward of cape Edward, and as it is in latitude 57° 44′, I was led to consider this opening as Portlock's harbour. We did not reach cape Edward until the afternoon, as the westerly breeze was soon succeeded by faint variable airs, that blew directly towards the shore, which was visible only at intervals, owing to the thick foggy and rainy weather, and which rendered the view we had obtained of this part of the coast, by no means satisfactory. During the night the wind settled in the western quarter, notwithstanding which, by its blowing gently, our distance from the shore was increased to about three leagues, and at day-light the next morning, (Wednesday 30) cape Edward

bore by compass N. 27 W. distant twelve miles; from whence the coast bends more to the eastward, and takes a direction about S. 30 E. to a very conspicuous opening, which I supposed to be that represented in some late publications, as separating the land on which mount Edgcumbe is situated from the adjacent shores, and named the Bay of Islands by Captain Cook, who imagined at the time he passed it, that such a separation did exist. We were opposite to this bay about eight in the morning, but the intermediate space between the bay of Islands and cape Edward was passed in very thick foggy weather; this disadvantage, in addition to the distance we had been from the land, may subject the delineation of that shore to some error. Near the land forming the southern side of the bay of Islands are several small islets, and from the south point of the bay, which I called POINT AMELIA, the coast extends S. 5 E. sixteen miles, to cape Edgcumbe, having nearly in the middle of that space an opening, with two small islets lying before it, and presenting an appearance of a good harbour, which I called PORT MARY; the other parts of the coast that were passed at the distance of about a league, are indented with small open bays.

As the day advanced a brisk gale from the N. W. attended us, with fair and pleasant weather, which enabled us to ascertain the ship's situation. At noon the latitude was found to be 57° 4½', longitude 224° 19'. The most northern part of the coast at this time in sight bore by compass N. N. W. port Mary N. 22 E. eight miles distant; and cape Edgcumbe S. 80 E. four or five miles distant. This cape, by the same observations was found to be in latitude 57° 2′, longitude 224° 25½′, which is one mile to the south and eighteen miles and an half to the eastward of its situation, as stated by Captain Cook. We had now also a very good view of mount Edgcumbe, and notwithstanding that it must be considered as high land, yet it was intirely free from snow, and seemed to us but an inconsiderable hill, when compared with the mountains we had generally seen, extending along the shores of this continent. Cape Edgcumbe forms the north-west point of a spacious opening, that branches into several arms, and is called by Mr. Dixon Norfolk Sound; its opposite or south-east point, which I have distinguished by the name of Point Wodehouse, lies from the cape S. 50 E. at the distance of seventeen miles. One of the northern branches of the sound, by its communication with the bay of Islands makes, it seems, the intermediate part of the sea coast an island. On the northern side of the sound, two leagues within cape Edgcumbe, are, what appeared to us, two islands, and N. N. W. from point Wodehouse, lies an extensive group of islets and rocks that extend three or four miles from the shore, which, from that point, with little variation, takes a course S. 36 E. This part of the coast is much broken

into small openings, with islets and detached rocks lying off it. We had advanced about sixteen miles only from point Wodehouse at eight in the evening, after which, the night was passed in using our endeavours to retain our station near this part of the coast; but we found ourselves on Thursday morning the 31st, much further from the land than we had expected; we had, however, a favorable breeze from the westward, with which we stood towards the shore, but the weather becoming thick and foggy, we were under the necessity to haul off the coast until ten in the forenoon, when the land being again visible, about four miles from us, we resumed our examination, passing some small openings, with several islets and detached rocks lying near to them; but of which we were precluded any distinct view by the haziness of the weather.

This disadvantage had attended us almost generally since our departure from Cross sound, and although I have reason to believe that we had nearly ascertained the general line of the coast, yet it is possible that there may be openings or harbours that we were unable to notice, as circumstances would not admit of our devoting sufficient time to a more minute examination.

By noon we had passed the south extremity of this archipelago, which was now found to stretch a few miles further south than Mr. Whidbey had estimated; our observations placed it in latitude 56° 10′, longitude 225° 37½′. It constitutes a very remarkable promontory, that terminates in a high bluff rocky cliff, with a round, high rocky islet lying close to it, and by its shores on its eastern side taking a sharp northerly direction, it becomes a very narrow point of land, which having been seen by Captain Colnett in his mercantile expedition to this coast, was by him named Cape Ommaney, and the opening between it and cape Decision, Christian Sound.

Our conjectures of soon finding a port in this neighbourhood, did not long remain unconfirmed, for after August 1794 advancing seven or eight miles from cape Ommaney, we discovered on the eastern shore of the archipelago an opening that took a south-west direction; and as it appeared likely to answer all our purposes we worked into it, with a fresh breeze directly against us until seven in the evening; when we anchored off a cove about half a league within the entrance of the harbour. On Friday morning the 1st of August the vessels were moored head and stern in this cove, there not being sufficient room for them to swing; and whilst those on board were so employed, accompanied by Mr. Whidbey and Mr. Johnstone, (who were each to undertake a distinct expedition, and by which means we entertained the hope of being enabled to connect the surveys of the present, with those of the two preceding seasons)

I rowed to the entrance of the port, in order to be better able to arrange the mode of conducting that service; this appeared to be no difficult task, as there were two given points before us, and both were nearly in view. The one was cape Decision, where our examination of the continental shore had finished the former season, and the other was point Gardner, from whence Mr. Whidbey had returned on his last excursion from Cross sound. Mr. Whidbey was directed to recommence his researches from that point, whilst Mr. Johnstone proceeded to cape Decision, there to begin his examination along the eastern shore of the sound northward, until the two parties should meet, or be otherways informed by notes which each party was to leave in conspicuous places for the government of the other, describing the extent of their respective surveys.

The space now to be explored occupied about a degree of latitude, and although I hoped that the examination of it with tolerable weather, would not employ the boats more than a week; yet in order that it should not be left unaccomplished for want of provisions, each of the parties was provided for a fortnight. The Discovery's yawl and large cutter was to proceed with Mr. Whidbey and Mr. Swaine; and the Chatham's cutter, and the Discovery's small cutter, with Mr. Johnstone and Mr. Barrie; with this arrangement both parties departed early in the morning of Saturday the 2d, in the prosecution of their respective pursuits.

The station we had taken, though sufficiently commodious for our purpose, was extremely solitary; there were no inhabitants on the adjacent shores, nor was there the smallest appearance of any part of our neighbourhood being a place of their resort, so that our time was not likely to be very interestingly employed, or our attention diverted from such necessary concerns as the ordinary services of the vessels now required. These consisted principally in repairing our sails and rigging in the best manner we were able. This had now become a business of constant employment. Some of the carpenters were caulking, others cutting such spars and timbers for plank as were wanted; and the brewers on shore were making spruce beer, which with a little samphire, and some halibut, caught with our hooks near the entrance of the harbour, were the only refreshments the place afforded.

The five following days we had light variable winds, attended by much rain; but the weather being more pleasant on Friday the 8th, I was employed in making a survey of the harbour. Its southern point of entrance is situated N. 15 E. about two leagues from cape Ommaney, its opposite point lying N. 7 W. two miles distant. The depth of water in mid-channel between these

points is 75 fathoms, but decreases to 8 or 10 close to the shores, without rocks or sands, excepting near the points, which are sufficiently evident to be avoided. South south-west, about half a mile from the north point of entrance, is a most excellent and snug bason about a third of a mile wide, and half a mile long; but its entrance is by a very narrow channel half a mile in length, in a direction S. 70 W., with some islets and rocks lying off its south point; these are steep nearly close to them, as are the shores on both sides, which vary from a sixth to a twelfth of a mile asunder, with a clear navigable passage from eight to twelve fathoms deep in the middle, and five fathoms on the sides. The soundings are tolerably regular in the bason, from 30 in the middle, to 10 fathoms close to the shores. Immediately within its north point is a fine sandy beach, and an excellent run of water, as is the case also at its head, with a third sandy beach just within its south point of entrance. In the vicinity of these beaches, especially the first and third, is a small extent of low land; but the other parts of the shores are composed of steep rugged cliffs on all sides, surrounded by a thick forest of pine trees, which grew with more vigour than in the other parts of the harbour. From its entrance to the head, it extends about a league in a direction S. 33 W., free from any interruption, although it is inconvenient from its great depth of water. Near the southern side of entrance lies a small islet and some rocks. but these are intirely out of the way of its navigation. The soundings cannot be considered as very regular, yet the bottom in general is good; in some places it is stony, in others sand and mud; but in the cove where the vessels were at anchor the bottom is rocky. The head of this cove approaches within the fourth of a mile of the head of another cove, whose entrance on the outside is about two miles to the south of the south point of this harbour. In the entrance of that cove the depth is seven fathoms, weeds were seen growing across it, and to the north of it is a small islet with some rocks. The surrounding shores are generally steep and rocky, and were covered with wood nearly to the water's edge, but on the sides of the adjacent hills were some spots clear of trees, and chiefly occupied by a damp moist moorish soil, in which were several pools of water. The surface produced some berry bushes, but the fruit at this season of the year was not ripe. This little information I procured from some of our gentlemen, who had made some excursions about the neighbourhood. In the above cove on the west side were found a few deserted Indian habitations, which were the only ones that had been met with. Our not having been visited here by any of the natives, was rather a mortifying circumstance, as they generally occasioned us some entertainment, and frequently added some variety to such refreshments, as by our own efforts we were enabled to procure.

From Saturday the 9th to Wednesday the 13th, the weather had been mostly boisterous, unsettled, and rainy; this kind of weather since our arrival had prevented our making any lunar observations, but had afforded me sufficient opportunities for ascertaining very satisfactorily the rates of the chronometers, by such means as were in my power on board, not having erected the observatory on shore; for as a convenient situation could not be found near the ship, and as I was in hopes we should not long be detained at this station, I was not particularly anxious to land the instruments; and under the circumstances of the weather, I had not much to regret that they had remained unremoved.

Other objects began to claim our serious attention. The plan that I had adopted for drawing our laborious examination of this coast to a conclusion, by the surveys on which the boats were now employed, I had fully expected would have been accomplished in a week or ten days at the furthest, but the whole time for which they had been provided was now expired, and Friday the 15th arrived without bringing any relief to our very anxious concern for their welfare. This unpleasant state of suspense continually brought to our recollection the various untoward accidents to which our expeditions in such small open boats had been liable; and when we adverted to the very treacherous behaviour of the Indians experienced by Mr. Whidbey in his late excursion from Cross sound, and the similar disposition that had been shewn to us the preceding season by those people who inhabit the countries not far distant to the south-eastward, our minds were filled with apprehension, and every hour increased our solicitude for the return of our absent friends. The service that each party had to perform, called them, if not into the immediate neighbourhood of these unfriendly people, at least into the vicinity of the places to which they frequently resort; and as they are by nature of a cunning, designing, and avaricious disposition, they were much to be feared; for although they could not be considered as a courageous tribe, yet the very unwarrantable and impolitic conduct of the several traders on this coast, in supplying them so amply with fire-arms and ammunition, and in teaching them the use of those destructive weapons, has not only given the natives a degree of confidence that renders them bold and importunate, but the dread which they before entertained of musketry is greatly lessened by their becoming so familiar to them; and they are now so well furnished, as to consider themselves when in their large canoes nearly on an equality with us, and of course are daily becoming formidable, especially to the parties in our small boats. These distressing considerations, in addition to the protracted absence of our friends, gave us but too much reason to be

apprehensive, that we had at length hazarded our little boats, with the small force they were able to take for their defence, once too often.

Whilst we endured this irksome anxiety, it is a tribute that is justly due to the meritorious exertions of those under my command, that I should again acknowledge the great consolation I derived on all painful occasions like this, by having the most implicit confidence in the discretion and abilities of my officers, and the exertions and ready obedience of my people. These happy reflections left me no grounds for entertaining the most distant idea that any precaution would be wanting to guard against, or effort unexerted to avert, so far as human prudence could dictate, the threatening dangers to which I was conscious they must necessarily be exposed.

In the hourly hope that these consoling reflections would once more be proved to have been well founded, by the safe return of the boats, I directed that every thing should be got in readiness to proceed with all dispatch in such direction as circumstances might require; for which purpose the vessels were moved to the opposite side of the harbour, as being a more convenient situation for our immediate departure. Here we remained in the most uncomfortable state of suspense that can be imagined until Tuesday the 19th; when, in the midst of a deluge of rain, with the wind blowing very strong from the S. E. we had the indiscribable satisfaction of seeing the four boats enter the harbour together from the northward. The parties soon reached the vessels, all well, and communicated the glad tidings of their having effectually performed the service, and attained the object that had been expected from this expedition.

The accomplishment of an undertaking, the laborious nature of which will, probably, from the perusal of the foregoing sheets, be more easily conceived than explained: a service that had demanded our constant and unwearied attention, and had required our utmost abilities and exertions to bring thus to a conclusion, could not, after the indefatigable labours of the three preceding years, fail of exciting in the bosoms of our little community, sensations of a nature so pleasing and satisfactory, that few are likely to experience in the same degree, who were not participators in its execution; and to the imagination of those alone, must I refer the happiness we experienced on this interesting event.

In order that the valuable crews of both vessels, on whom great hardships and manual labour had fallen, and who had uniformly encountered their difficulties with unremitting exertion, cheerfulness and obedience, might celebrate the day, that had thus terminated their labours in these regions; they were served with such an additional allowance of grog as was fully sufficient to answer every purpose of festivity on the occasion. This soon prompted a desire for mutual congratulations between the two vessels, expressed by three exulting cheers from each; and it may be easily conceived that a greater degree of heart-felt satisfaction was scarcely ever more reciprocally experienced, or more cordially exchanged.

We had now no reason for remaining in this port, which, in consequence of this visit, obtained the name of PORT CONCLUSION, excepting that which a continuation of the inclement weather produced, which detained us until the evening of Friday the 22d. But before I proceed to the recital of subsequent occurrences, it is necessary that I should advert to the manner in which the late survey in the boats had been executed.

Agreeably to the directions Mr. Whidbey had received, he proceeded to the station where his former researches had ended; here he arrived about noon on the 3d, after passing close along the western shore of the strait, until he was opposite to the branch leading to the eastward. In his way he passed several openings on the western shore, some of which he had reason to suppose communicated with the ocean in a westerly direction, and others seemed to afford tolerably well sheltered anchorage. The weather at this time was so thick and rainy, that the party had but a very imperfect view of the inlet before them. They, however, continued along its larboard shore, in a direction N. 65 E. for about six miles and an half, passing several small rocky bays, and at this inlet arrived at a high steep bluff rocky point, named by me Point Nepean, situated in latitude 57° 10′, longitude 226° 6′; off which lies a ledge of rocks about half a mile, and from this point the coast takes a more northerly direction; but the weather became so thick that the party was obliged to stop about two miles beyond it, where the operation of the same cause detained them until eight o'clock the next morning; when, with very hazy unpleasant weather, they resumed their inquiries, and passed between a coast much indented with small bays, and vast numbers of small islets and rocks, both above and beneath the surface of the water. The weather cleared up towards noon, and enabled Mr. Whidbey to observe the latitude to be 57° 18′, on a small islet, close to a point named by me Point Pybus, lying from point Nepean N. 38 E. ten miles and an half distant. From this station a tolerably distinct view was obtained of the inlet, in which the party had advanced thus far nearly in the dark. It was now seen to be a spacious arm of the sea, containing, in most directions, many islands, islets, and rocks; the country on the left hand side, being that shore the party had coasted, excepting about point Nepean, seemed in general to be but moderately elevated, and although it is composed of a rocky substance, produced a very fine forest, chiefly of pine timbers; but the opposite side of the inlet was too far off for us to notice any thing respecting it. From this station the party proceeded still along a very rocky shore, about six miles further, in a direction N. 41 E. to a point called by me Point Gambier, which forms the south point of a branch leading to the north-westward: its opposite point of entrance, named by me Point Hugh, lying from it N. 29 E. at the distance of five miles. Beyond this, another extensive branch appeared to stretch to the northward, but the former being the object of their first inquiry, they proceeded along its western shore; this is low, and in many places is terminated by sandy beaches. On one of these, about ten miles from point Gambier, they rested for the night, which was very stormy from the southward, with continual rain, and dark gloomy weather; this lasted until ten in the forenoon of the 5th, when the wind moderating, and the weather permitting them to see some little distance before them, they proceeded, with a favorable breeze, up this branch of the ocean, called by me SEYMOUR'S CHANNEL, which, at this place, is from two to three miles wide, and which kept gradually increasing to its head, where in a direction of N. E. and S. W. it is nearly two leagues across: on the western side are many small bays, and it terminates, at its north-west extremity, in a small brook of fresh water, in latitude 57° 51', longitude 226°, lying from point Hugh N. 33 W. distant twenty-nine miles. One mile from the south point of the brook is an island, about three miles and an half long, and half a league broad; and half a mile from the south point of that island lies another, about the same width, and six miles long; both these islands lie in the above direction, and occupy the middle of the branch, having a great number of islets on their north-east sides, and some rocks on their opposite shores. Here were seen five Indians, who were very shy. The party caught some young ducks, but they were very fishy, and bad eating. The adjacent country is moderately high, and was covered with timber of large growth, excepting towards point Hugh, which is a lofty rocky promontory, from whence extends a ledge of rocks, where the sea broke with considerable force. Owing to the badness of the weather these rocks were not passed until ten at night on the 6th, and even then not without the most imminent danger, occasioned by a heavy rain and the darkness of the night, which prevented the party from discovering their perilous situation until they were nearly amongst the breakers, when, by timely and great exertion, they happily passed clear of them, and rested for the night, about a mile on the north-east side of that point. The rain continued, with a strong gale from the southward, until the forenoon of the 7th, when the atmosphere becoming more clear, their situation was discovered to be on the western side of the branch which was seen from point Gambier, extending to the northward, about four miles in width; but was now seen to take a more westerly direction, nearly parallel

to Seymour's channel, which the party had quitted; and making the intervening shore a long narrow strip of land. The opposite or north-east side of this northern branch is composed of a compact range of stupendous mountains, chiefly barren, and covered with ice and snow. The route of the party was along the south-west side; this is nearly straight, compact, and free from rocks or other interruptions, and favored by a S. E. breeze, they advanced about twelve leagues from point Hugh; where they stopped for the night, opposite to a high round island, lying in the middle of the channel.

From this station, situated in latitude 58° 1′, longitude 226° 3′, in the morning of the 8th, they departed with calm rainy weather, and pursued their researches along the western shore, which now took a direction N. 10 W. eight miles, to a point named by me POINT ARDEN, where this branch divided into three arms; that which appeared to be a continuation of the arm they had been navigating took a north-easterly direction; the second, lying about a league to the N. W. not more than half a mile wide, took a northwesterly direction, and, apparently, made the land on its south-west side an island. About three leagues up this arm is a small islet nearly in midchannel. This afforded another instance of the partial existence of the ice, which here intirely blocked up this arm, whilst the others were free from any such inconvenience. The third and widest arm took a general course N. 81 W. and is about a league in width; this agreeably to our usual practice was first pursued along the southern shore about five leagues to point Young, forming the east point of a cove, with an island and rock in its entrance, and another at the bottom of the cove. At this point the width of the arm decreased to about half a league, and from it the southern shore stretched N. 42 W. At the distance of about seven miles the east point of another small cove was reached, with an islet lying near it. At the back of this islet was an Indian village, and another was seen on an opposite point lying north, about a league and a half from this cove, on the land forming the north side of the arm, and seemed to be the north-west point of the land before mentioned, appearing to be an island.

As Mr. Whidbey advanced from this cove, the shore still continuing the same line of direction, he recognized the spot, from whence in his excursion from Cross sound, on the night of the 18th of July he had retired, in consequence of the hostile behaviour of the natives, and he now became satisfied that he had been mistaken in supposing at that time the branch to be closed; as it was now evident that it communicated with that which the party had thus navigated, making the intermediate land, which had hitherto been considered as a part of the continent, one extensive island, which I called ADMIRALTY ISLAND.

In order however that no doubt should in future arise, Mr. Whidbey proceeded to point Retreat. After passing the village, which from that point lies S. 33 E. at the distance of about ten miles, the boats were followed by many large and small canoes; and as the evening was drawing near, to get rid of such troublesome visitors a musket was fired over their heads, but this as before had only the effect of making them less ceremonious; this was proved by their exertions in paddling to come up with our party, which they did very fast, until another shot was fired at the largest canoe, and was supposed to have struck her, as the Indians all fell back in the canoe, and were quite out of sight; they, however, managed to bring their canoe's stern in a line with the boat's sterns: in that situation they paddled backwards with all their strength, and at the same time screened every part of their persons, by the height and spreading of their canoes' bows, excepting their hands, which, in the act of paddling only became visible, so very judiciously did they provide for their safety in their flight; in which, having gained some distance from our party, who had quietly pursued their course, the canoes stopped for a short time, as if for consultation, but soon made the best of their way back to the village, and Mr. Whidbey proceeded without further interruption to point Retreat. In this route the party passed by the south-west side of a very narrow island, about half a mile broad, and about a league and an half long; this before had been passed on its north-east side, in the night of the 18th of July, but it was then so dark that it was not discovered to be an island. The channel, about three fourths of a mile wide, which was now pursued, is by rocks and islets rendered equally unsafe and intricate with that mentioned on the former survey, so that the communication between these two extensive branches of the ocean is, by these impediments, very dangerous for the navigation of shipping. In this south-west channel, about a league from point Retreat, on the southern shore, is a deep cove, which, with the narrow island lying before it, forms a very snug harbour, of good access by the passage round to the north of point Retreat; as the rocky part of the channel lies to the south-east of this cove, to which Mr. Whidbey gave the name of BARLOW'S COVE. The shores of Admiralty island, which now had been completely circumnavigated, and found to be about sixty leagues in circuit, are, excepting at this and its south-eastern part, very bold, afford many convenient bays, likely to admit of safe anchorage, with fine streams of fresh water flowing into them, and presented an aspect very different from that of the adjacent continent, as the island in general is moderately elevated, and produces an uninterrupted forest of very fine timber trees, chiefly of the pine tribe; whilst the shores of the continent, bounded by a continuation of those lofty frozen mountains, which extend south-eastward from mount Fairweather, rose abruptly from the water side, and were

covered with perpetual snow, whilst their sides were broken into deep ravines or vallies, filled with immense mountains of ice.

Such was the contrast exhibited at point Retreat, where Mr. Whidbey had an opportunity of seeing several of the points that had been fixed by his former observations, and which, on the present occasion, assisted him in correcting his survey, for he had thus far been able to procure but one observation for the latitude, since his leaving port Conclusion.

From point Retreat the party returned to Barlow's cove, where they rested for the night. The next morning a strong gale blew from the S. E. with a very heavy fall of rain; this greatly impeded their progress in their way down this passage, which dividing Admiralty island from the continent, obtained the name of STEPHENS'S PASSAGE; the point on which the northern village is situated, was found to be, as had before been conjectured, the west point of entrance into the narrow icy arm, in which was again seen the islet noticed the preceding morning in an E. S. E. direction, whence it was clearly ascertained, that the intermediate land, forming the north side of Stephens's passage was an island, which after the Bishop of Salisbury, I named Douglas's Island; it is about twenty miles long, and six miles broad in the middle, but becomes narrow towards each end, particularly that to the eastward, where it terminates in a sharp point: the channel between this island and the main land, being rendered by the ice impassable, the boats were steered over to the southern shore for protection against the south-east wind, which had now become so violent, that it was late in the evening before they had passed the southernmost village; and after they had proceeded about three miles to the eastward of it, they rested for the night.

Although the party had been a considerable time within sight of the village of these unfriendly people, not a single individual had been seen; but they were heard making a most hideous and extraordinary noise in their houses, the sound of which reached the resting place of our party, by whom it was supposed, that some person of consequence had been hurt by the shot fired the preceding evening at the large canoe, and which not improbably had been the occasion of their hasty retreat. In the morning of the 10th they were visited by an old Indian man, and a boy, who after receiving some presents went about their business, and our party proceeded to the arm leading to the north-east from Stephens's passage, having its western point of entrance, which I have called Point Salisbury, situated in latitude 58° 11', longitude 226° 3', in which the great quantity of floating ice, with a strong northerly wind against them, so retarded their progress, that a passage was with great difficulty effected; the weather here was severely cold, with

frequent showers of sleet and rain. From its entrance it extended N. 11 E., about 13 miles, where the shores spread to the east and west, and formed a bason about a league broad, and two leagues across, in a N. W. and S. E. direction, with a small island lying nearly at its north-east extremity. From the shores of this bason a compact body of ice extended some distance nearly all round; and the adjacent region was composed of a close-connected continuation of the lofty range of frozen mountains, whose sides, almost perpendicular, were formed intirely of rock, excepting close to the water side, where a few scattered dwarf pine trees found sufficient soil to vegetate in; about these the mountains were wrapped in perpetual frost and snow. From the rugged gullies in their sides were projected immense bodies of ice, that reached perpendicularly to the surface of the water in the bason, which admitted of no landing place for the boats, but exhibited as dreary and inhospitable an aspect as the imagination can possibly suggest. The rise and fall of the tide in this situation was very considerable, appearing to be upwards of eighteen feet. The examination of this bason, &c. engaged the party until near noon of the 11th, when they returned along the eastern shore, which is a continuation of the same range of lofty mountains rising abruptly from the water side; by dark they reached the island mentioned on the 7th, as lying in the middle of Stephens's passage; here they took up their lodging for the night, which was very stormy from the south-eastward, and attended with a heavy rain. In the morning of the 12th the wind became more moderate, but the rain continued with an extremely unpleasant cross sea, which the violence of the wind during the night had occasioned. This greatly retarded their progress down the passage, the eastern shore of which was found to be much indented with small bays, and to take a general direction from a spot opposite to the island they had quitted S. 41 E., about twelve miles, to a point which I named POINT STYLEMAN, forming the northwest point of a harbour, situated in latitude 57° 53′, longitude 226° 22′; the opposite point of its entrance lying from it S. 33 E., at the distance of two miles. This harbour, which obtained the name of PORT SNETTISHAM, first extends about a league from its entrance in a north-east direction, where on each side the shores form an extensive cove, terminated by a sandy beach, with a fine stream of fresh water. On the north-west side of entrance is a small cove, in which there is also a run of water, with an islet lying before it. The shores are high and steep, and produce very few trees. Several smokes were seen, but none of the inhabitants made their appearance. From the south point of this port, which I called POINT ANMER, the shore takes a direction S. 29 E., nine or ten miles, to a point, that obtained the name of POINT COKE, and which forms the north point of a deep bay, about four miles wide, which I called HOLKHAM BAY; this the party did not reach until

the morning of the 13th, when, nearly in the middle of it, were found three small islands; to the westernmost of which a shallow bank extended from each side of the bay, which is bounded by the still continued lofty range of mountains. Much floating ice was seen within the islands. From point Coke, in a direction S. 43 W., two miles and an half, are two rocky islets, nearly in the middle of the branch, and from the south point of this bay, which I called Point Astley, the shores are very rocky, and contain many small open coves, taking a southerly direction thirteen miles, to a point which obtained the name of Point Windham, situated in latitude 57° 31′, longitude 236° 36′. This point forms the eastern point of entrance into Stephens's passage; here they again arrived in the spacious part of the inlet noticed from point Gambier.

As the party advanced several islets were seen in various directions, and from point Windham, on the eastern side, were some bays; the shores took a general direction S. 25 E., twelve miles and an half, to a point named by me POINT HOBART, being the north point of a small branch, where the party rested for the night, and on the following morning they found its points of entrance to lie from each other N. 11 W. and S. 11 E., about a league asunder. From its entrance it extends S. 70 E., five or six miles, where it terminated. Some islets and sunken rocks lie near its south point, which I called Point Walpole. From point Hobart extends a bank of sand a little distance from the shore, but there is a clear passage between it and the islets, within which, it forms a snug harbour, with soundings at a considerable distance from the shore from ten to six fathoms water, sand and muddy bottom. It is bounded by lofty mountains, and from their base extends a small border of low land forming the shores of the harbour, which I called PORT HOUGHTON. On quitting this place many rocks were seen along the shores, which took a direction S. 12 W., six miles and a half, to a very conspicuous low projecting point, which obtained the name of CAPE Fanshaw, situated in latitude 57° 11′, longitude 226° 44½′. Here was seen an old deserted village, and a spacious branch of the inlet eight miles wide, leading to the eastward and south-east.

From its very extensive appearance in these directions, Mr. Whidbey became apprehensive, lest their utmost exertions should not enable them to draw their labours to a conclusion during his present excursion, and for this reason he lost no time in proceeding along its northern shore, which from cape Fanshaw takes a direction S. 66 E., sixteen miles, to a low narrow point of land two miles long, and half a mile broad, stretching south from the general line of the coast on each side of it; but this distance, owing to the badness of the weather, and a strong gale from the eastward, was not

reached before the 15th in the afternoon. At this low point, which I called Point Vandeput, the width of the branch decreased to about three miles and an half, in a south direction, to a steep bluff point, where, as also from this station, the shores of the branch took a more southerly course. South from this point a shoal extends about a mile, and on its eastern side a small bay is formed, from whence the eastern shore trends S. 34 E., seven miles, to another point, where a shoal stretches out about three fourths of a mile from the shore; this prevented the boats approaching the point, although several attempts were made, in the hope of gaining shelter from the inclemency of the weather, but it was to no effect, and the party was obliged to remain cold, wet, and hungry (having no provisions cooked) in the boats, until the morning of the 16th; when the weather became fair and clear, and shewed their situation to be before a small extent of low flat land, lying immediately before the lofty mountains, which here rose abruptly to a prodigious height immediately behind the border. A few miles to the south of this margin the mountains extended to the water side, where a part of them presented an uncommonly awful appearance, rising with an inclination towards the water to a vast height, loaded with an immense quantity of ice and snow, and overhanging their base, which seemed to be insufficient to bear the ponderous fabric it sustained, and rendered the view of the passage beneath it, horribly magnificent.

Soon after passing this very remarkable promontory, the arm of the sea over which it hangs appeared to be intirely closed by a beach, extending all round the head of it; at the south-east extremity was a large body of ice, formed in a gully between the mountains that approach the water side, from whence, much broken ice seemed to have fallen, and had intirely covered the surface of the water in that direction. From the south-west corner issued a narrow stream of very white water, that seemed to have obtained this appearance by the melting snow draining through the low land that was seen lying in that direction; and as it was considered not to be navigable, Mr. Whidbey was anxious to lose no time in the further extension of his researches. Having now been absent longer than the time for which the party had been supplied, and being distant upwards of an hundred miles from the vessels, towards which they had to proceed along a coast, the principal part of which might require a very minute examination; he made the best of his way back, along the southern shore of the branch.

We became afterwards informed by Mr. Brown of the Jackal, that the above narrow stream was found, on his subsequent visit to this place, to afford a passage for canoes and boats, and that it communicated with the apparently shoal inlet that Mr. Johnstone had made several unsuccessful

attempts to enter on the 28th of August, 1793. Mr. Brown also stated, that the intervening land which had the appearance of forming the head of the arm between its south-east and south-west extremities, is an island, situated on a very shallow bank, which, at the depth of a few feet, connects the two shores, and at low water spring tides becomes dry. This may serve to account for the report of the Indians to Mr. Brown the preceding year, and which he obligingly communicated to me on the 21st of July, 1793, respecting *Ewan Nass*, by which means an inland navigation for canoes and boats is found from the southern extremity of Admiralty inlet, in latitude 47° 3′, longitude 237° 18′, to the northern extremity of Lynn canal, in latitude 59° 12′, longitude 224° 34′. By this information it likewise appeared, that our conclusions at the end of the last season, respecting cape Decision being a continental promontory were not precisely correct, as, by the shallow boat passage discovered by Mr. Brown, that cape is found to be separated above the level of high water mark from the continent.

Mr. Whidbey observes, that in no one instance during his researches, either in the several branches of Prince William's sound, in those extending from Cross sound, or, in the course of his present excursion, did he find any immense bodies of ice on the islands; all those which he had seen on shore, were in the gullies or vallies of the connected chain of lofty mountains so frequently mentioned, and which chiefly constituted the continental shore from Cook's inlet to this station; though, in different places these mountains are at different distances from the sea side. He likewise observes that all the islands, or groups of islands, were land of a moderate height, when compared with the stupendous mountains that compose the continental boundary, and were still seen to continue in a south-eastern direction from this shallow passage, whilst the land to the westward assumed a more moderate height, was free from snow, and produced a forest of lofty pine trees. These observations more particularly applying to the former, than to the subsequent, part of this survey, I have, for that reason, thought proper to introduce them in this place, and shall now resume the subject of Mr. Whidbey's excursion.

The day being fair and pleasant, Mr. Whidbey wished to embrace this opportunity of drying their wet clothes, putting their arms in order, and giving a thorough cleaning to the boats, which, from the continual bad weather, had now become an object of real necessity. For this purpose the party landed on a commodious beach; but before they had finished their business a large canoe arrived, containing some women and children, and sixteen stout Indian men, well appointed with the arms of the country, but without any fire-arms. They behaved in a very friendly manner on the beach

for a little time, but their conduct afterwards put on a very suspicious appearance; the children withdrew into the woods, and the rest fixed their daggers round their wrists, and exhibited other indications, not of the most friendly nature. To avoid the chance of any thing unpleasant taking place, Mr. Whidbey considered it most humane and prudent to depart, and he continued his route down the branch along its south-west shore, passing some islets that lie near it. The Indians did the same, but kept on the opposite shore, and in the course of a little time the canoe disappeared. In the hope of being quit of these people the party stopped to dine near the high bluff observed from point Vandeput, but before they had finished their repast the same Indians, who must have turned back unperceived, for the purpose of crossing over to follow the boats, were seen coming round the point of the cove in which was the party, and not more than a quarter of a mile from their dinner station; as the canoe approached a musket was fired over it, in order to deter the Indians from advancing; but this, as on former occasions, seemed to encourage them, and they appeared to come forward with more eagerness, but on a second shot being fired at the canoe they instantly retreated with all possible speed, and were soon again behind the point: yet as Mr. Whidbey suspected they might be inclined to attempt by surprise, that which they dared not venture to do openly, he hastened the meal of his party, and put off from the shore; this was scarcely effected, when his conjectures were proved to have been well founded, by the appearance of a number of armed people issuing from the woods, exactly at the spot where our party had dined; and nearly at the same instant of time, the canoe was again seen paddling round the point of the cove.

This conduct, on the part of the Indians, greatly attracted the observation of the party, and whilst they were watching the motions of these people, their attention was suddenly and most agreeably called to an object of more pleasing concern; that of the boats under Mr. Johnstone's direction, coming within sight about two miles distant.

The stratagem thus practised by these Indians is alone sufficient to shew, that our apprehensions on board, for the safety of our absent friends, had not been without reason; and it is one, amongst many other circumstances, which taught me to believe, that we were but just in time, for the accomplishment of the arduous and hazardous service in which we had been so long engaged; as the very unjustifiable conduct of the traders on this coast, has encouraged the inhabitants to attempt such acts of hostility, that the means we possessed to repel their attacks, would, in all probability, have been insufficient for our protection, had it been our lot to have tried the experiment one year later.

On the sight of the two other boats all the Indians disappeared, and our two parties were not long before their forces were united. It was immediately understood that Mr. Johnstone had examined the coast from cape Decision to this station. On this occasion Mr. Whidbey remarks, that it is not possible for language to describe the joy that was manifested in every countenance, on thus meeting their comrades and fellow-adventurers, by which happy circumstance, a principal object of the voyage was brought to a conclusion; and the hearty congratulations that were mutually exchanged by three cheers, proclaimed not only the pleasure that was felt in the accomplishment of this laborious service, but the zeal with which it had been carried into execution, and the laudable pride that had been entertained by both parties, in having been instrumental to the attainment of so grand an object.

The little squadron now proceeded to a cove about a league to the westward, where they took up their abode for the night. In the course of the evening no small portion of facetious mirth passed amongst the seamen, in consequence of our having sailed from old England on the *first of April*, for the purpose of discovering a north-west passage, by following up the discoveries of De Fuca, De Fonte, and a numerous train of hypothetical navigators.

Early in the morning of the 17th both parties set out on their return to port Conclusion, and being favored with a fresh gale from the S. E. they made great progress under sail.

In the event of the two parties meeting, and consequently a finishing stroke being put to the examination of the shores of North-West America, within the limits of my commission; Mr. Whidbey had my directions to take possession of the said continent, from New Georgia north-westward to cape Spencer, as also, of all the adjacent islands we had discovered within those limits; in the name of, and for, His Britannic Majesty, his heirs, and successors: this, on the parties stopping to dine, was carried into execution; the colours were displayed, the boats' crews drawn up under arms, and possession taken under the discharge of three vollies of musketry, with all the other formalities usual on such occasions, and a double allowance of grog was served to the respective crews, for the purpose of drinking His Majesty's health. The happy meeting of the two parties, having taken place on the birth-day of His Royal Highness Frederick Duke of York, the sound in which they met I honoured with the name of PRINCE FREDERICK'S SOUND, and the adjacent continent, north-westward from New Cornwall to Cross sound, with that of New Norfolk.

From hence the boats made the best of their way to the vessels, without any particular occurrence, until they arrived at port Conclusion, when the wind blowing very hard from the southward, brought with it a heavy confused sea, which, with the meeting of the tides, produced a kind of race. Here the boats, for some time, were in a most critical situation, but by the great exertions of their crews, they were at length preserved, and arrived safe, as has been before related.

It now remains to recount the circumstances attendant on Mr. Johnstone's expedition; who, from cape Decision, found the exterior coast first take a direction N. 30 W. about three leagues, and then N. 10 W. about the same distance, to the north point of a harbour about a mile wide; the intermediate shore, between it and cape Decision, has in it many small open bays, and at some distance from it, lie many rocks. This station was reached in the afternoon of the 3d, the harbour was found free and easy of access, by keeping near the southern shore; in general it is about a mile wide. At first it takes a north-east course for about a league, and then terminates in a S. S. E. direction, about a league further, having some islets and rocks in it, notwithstanding which it affords very excellent shelter, with soundings from 17 to 34 and 12 fathoms water. It is conveniently situated towards the ocean, has its north point in latitude 56° 171/2′, longitude 225° 58′, and obtained the name of PORT MALMESBURY. Its north point, which I have called POINT HARRIS, is rendered very remarkable, by its being a projecting point, on which is a single hill, appearing from many points of view like an island, with an islet and some rocks extending near a mile to the south-west of it. North from hence, three miles and an half, and then N. N. E. about the same distance, is the south point of a large bay, full of innumerable islets and rocks, with a great number of very small branches in various directions; its examination occupied much time, and its southern extremity reached to the latitude of 56° 15′, longitude 226° 15′; its eastern branch to latitude 56° 28′, longitude 226° 18′; and its northern extremity to latitude 56° 33′, longitude 226° 12′. Between the two latter the party met with about a dozen of the natives, who occupied a single habitation on the shore, and were the first people Mr. Johnstone's party had seen on this expedition. The 5th was very stormy, with much rain, but the 6th was fair and pleasant, which enabled them to finish the examination of this intricate sound, and in the evening they reached its north-west point of entrance, which I called POINT ELLIS, where they remained during the night. It is situated in latitude 56° 31', longitude 225° 56'. This also forms the south-east point of another small inlet, which is equally intricate, and as much incommoded with islets and rocks. The examination of this employed the whole of the 7th. It forms a narrow arm, extending from point Ellis N. 56 E. for ten miles, where it terminates. Here they found a single house, similar to that before mentioned, and containing about as many inhabitants. From hence they returned along the northern side of this arm, from half a mile to half a league in width, and about seven miles from its head to its north point, which forms also the south point of a bay or inlet, full of islets and rocks, the north point of which, called by me Point Sullivan, lies in latitude 56° 38′, longitude 225° 51½'. From point Sullivan the shores were less rocky, and became firm and compact, taking a direction N. 9 W. thirteen miles, to a conspicuous point, which after Vice-Admiral Kingsmill, obtained the name of POINT KINGSMILL. From this point, which is the south point of the spacious inlet, up which Mr. Whidbey had pursued his researches to the north-eastward; the shores trended N. 47 E. six miles and a half to another point, which I called POINT CORNWALLIS, and which forms the south-west point of entrance into an arm leading to the south-east. The space between these two points is occupied by two bays, each taking a south-easterly direction, from a mile to half a league wide, and four or five miles deep, in which as usual along the coast were many islets and dangerous rocks. The examination to this extent, employed the party until the 10th in the morning, when they quitted the main inlet, and pursued the arm leading to the south-eastward, which first took a direction S. 68 E. for nine miles, and then S. 26 E. for seven miles and a half further; here a branch was entered about half a league wide, that took a S. S. W. direction for about eight miles, where it terminated in latitude 56° 38½'. The shores of the southern parts of this branch, which I have distinguished by the name of PORT CAMDEN, are pretty free from islets and rocks, but those to the north-west of it, are lined with them, and render the approaching of it extremely dangerous. The termination of this branch reaches in a north and south direction, within about two miles of the northeast extent of the small inlet which the party had examined on the 7th, and in the same line, within about four miles of the northern part of that which had engaged them on the 5th and 6th. So very tediously and slowly were our researches carried into effect in this very broken and extraordinary region!

At the head of the last mentioned branch was a small Indian village consisting of three houses, and containing about forty or fifty persons. On meeting some of the Indians here who had been seen in the southern branches, it gave rise to an opinion, that some small passage existed which had escaped the notice of the party; but this Mr. Johnstone observes was soon explained by the Indians who took up their canoe, and pointing to a small valley in a southerly direction, made signs that could not be mistaken, that they had walked, and had brought their canoe, over the isthmus. The

next morning, although very wet and hazy, they returned along the eastern side of this arm, and passed its north-east point, which from the head lies about N. N. E. at the distance of about four leagues, near which are some rocks. The party immediately entered another branch, about the same breadth, which took first a direction S. 68 E. for about five miles, and then turned irregularly round to the southward. The weather being clear about noon, the observed latitude was found to be 56° 42′, longitude 226° 25′. The branch in which they had thus advanced, although too shallow and rocky for the passage of any vessels larger than boats or canoes, and even for them intricate and dangerous, would not have been further examined, had not the tide been found running in a very contrary direction, to that which had been observed at its entrance, the flood tide here setting to the northward. This circumstance gave rise to an opinion, that this branch would be found to communicate with the main inlet they had left under Mr. Whidbey's examination extending to the north-east; and should it make the intermediate very broken land an island, it would greatly facilitate their survey of what they supposed to be the continental shore.

This hope induced Mr. Johnstone to persevere, but instead of the channel stretching to the eastward as it was wished, and expected to do, it extended to the westward of south, and communicated with a bay in the north-west part of Clarence's strait, which had been examined by Mr. Johnstone on the 11th of September, 1793; but this communication was not at that time ascertained, in consequence of the numerous islets, rocks, and shoals, that exist in that bay, and render it intirely unnavigable for shipping. The party now distinctly saw port Protection and the adjacent shores, and having taken the necessary angles that their further survey would demand, they returned by the way they had arrived; but the progress of the boats was rendered very slow by the numberless rocks and islets, and the examination of the several little bays into which the shores were broken. To the eastward were seen high distant mountains covered with snow, but the land in their neighbourhood was, comparatively speaking, low, of a very uneven surface, much divided by water, and covered with wood. Mr. Johnstone unwilling to lose any advantage that presented itself, stopped but a short time on the night of the 12th, in order that he might take the benefit of the flood the next morning, which returning about half after one, they proceeded with it close along the eastern shore round every cove and corner; for they could not by any other mode have determined its boundary, as they were at this time surrounded by a very thick fog, that obscured every distant object until about ten in the forenoon, when a fresh westerly breeze brought fair and clear weather, and discovered their situation to be near the west point of a small branch, in latitude 56° 50′, longitude 226° 16′. The adjacent shores in all directions, but particularly to the north-west, were lined with islets and rocks, that extended nearly two miles into the opening, which was here about two leagues across.

This branch about a mile wide stretched about five miles in an eastwardly direction, and there it terminated; but before the party had reached this extent, Mr. Johnstone states, that the remains of no less than eight deserted villages were seen; some of them were more decayed than the others, but they were all uniformly situated on the summit of some precipice, or steep insular rock, rendered by nature almost inaccessible, and by art and great labour made a strong defence; which proved, that the inhabitants had been subject to the incursions of hostile visitors. These fortified places were well constructed with a strong platform of wood, laid on the most elevated part of the rock, and projecting so far from its sides as to overspread the declivity. The edge of the platform was surrounded by a barricade raised by logs of wood placed on each other. In the vicinity of these ruins were many sepulchres or tombs, in which dead bodies were deposited. These were made with a degree of neatness seldom exhibited in the building of their habitations. A wooden frame was raised about ten feet from the ground, the upper half of which was inclosed, and in the open part below in many, though not in all of them, was placed a canoe; the flooring of the upper part was about five feet from the ground, and above that the sides and top were intirely closed in with boards, within which were human bodies in boxes wrapped up in skins or in matting. These repositories of the dead, were of different sizes, and some of them contained more bodies than the others; in the largest there were not more than four or five, lying by the side of each other, not one appearing to be placed above the rest; they were generally found near the water side, and very frequently on some conspicuous point. Many of these sacred monuments seemed to have been erected a great length of time, and the most ancient of them had evidently been repaired and strengthened by additional supporters of more modern workmanship. Hence it would appear, that whatever might be the enmity that existed between the several tribes when living, their remains when dead were respected and suffered to rest quietly and unmolested.

Having satisfied their curiosity in these respects, and having gained the head of the arm, they stopped to dine in a cove a little way from its termination. Hitherto the party had not seen any of the natives, but at this time they were visited by several who came chiefly from the head of the arm, where they must have been secreted, or they could not have escaped being noticed. The number of these people accumulated very fast, and in a

very little time, they amounted to upwards of an hundred, amongst whom were a chief, and several of the Indians seen at the isthmus on the preceding Thursday and Sunday. Whatever might be the real intention, or the disposition of these strangers, their numbers and general appearance, induced Mr. Johnstone to desire them to keep at a greater distance; this the Indians did not seem inclined to do, although every sign to that effect was made, and our party armed in readiness for their defence. As their numbers increased, so were they encouraged to advance; on some muskets being fired they stopped for a short time, but soon again followed the boats as they returned down the arm, keeping just without the reach of musketry. Although these people had amongst them some guns, and were otherways well armed with their native weapons, Mr. Johnstone did not impute to them any hostile intention, but attributed the ardour with which they had striven to join our party, to a desire of bartering away their sea otter skins, of which they appeared to have many, for European commodities. The situation of the party on this occasion was in a very confined place, and being surrounded by such a tribe of armed Indians, with reason to apprehend there might be others at no great distance, it became prudent to avoid, if possible, a nearer intercourse, by which alone the true spirit of their design could have been known, and in which they must have been greatly interested, as they continued to follow the boats, until after they had gained a more open situation. One of the canoes now advanced before the rest, in which a chief stood in the middle of it, plucking the white feathers from the rump of an eagle, and blowing them into the air, accompanied by songs and other expressions, which were received as tokens of peace and friendship. The canoe was now permitted to come alongside Mr. Johnstone's boat, to whom the chief instantly presented a sea otter skin, for which Mr. Johnstone made him a suitable return, with every expression likely to be understood of his pacific disposition; the Indians seemed to be sincere in their professions also, as they now came to the boats unarmed, and with the utmost confidence in their security. Expressions of mutual friendship were now exchanged, and on its being signified to the chief, that as night was approaching the canoes should no longer follow the boats, he returned to the rest of his countrymen; but they still continued to paddle after our boats until a musket or two were discharged, when they all dropped a-stern and were no more seen

However satisfactory the latter part of the natives' conduct may appear to be, as to their friendly intentions, yet a distrust which prudence on such occasions ought always to suggest, induced Mr. Johnstone to proceed as far as he conveniently could before he stopped for the night; but as the shore was quite steep and compact they continued to row until after midnight, when they came to a grapnel, and rested in the boats. This day had proved extremely fatiguing to the people, as they had been nearly the whole of the twenty-four hours on their oars. In this route they had reached the main arm of Prince Frederick's sound, and had found the shores to form a large rounding, though not lofty promontory, in which were several small open bays, and near it several detached rocks. This promontory obtained the name of Point Macartney, the western extremity of which is situated in latitude 57° 1½′, longitude 226° 12′. From hence the shore trends N. 15 E. about a league, where the width of the sound is about seven miles across, in a direction N. 47 W. to point Nepean. From this station N. 28 E., at the distance of about a league and a half lies a small island, with patches of rocks from this point reaching nearly to its shores. The promontory still took a rounding direction about N. 65 E., five miles further, from whence the southern shore of the sound extends N. 75 E. seventeen miles, to the west point of a small cove, the only opening in the shore from point Macartney; but off the little projecting points between this cove and that point, are detached rocks lying at no great distance from the shore. This extent was not reached until the afternoon of the 16th, in consequence of the wind blowing hard from the eastward, attended with a heavy rain, against which they contended with their utmost exertions, lest the exhausted state of their provisions should oblige them to retire before they could join the other party. This cove extended S. 34 E. about a league, where it terminated, and according to our survey, formed a narrow isthmus between it and the head of Duncan's channel, about two miles across in a northern direction; and is another striking instance of the very extensive, and extraordinary insular state of the region lying before the western coast of the American continent, between the 47th and 59th degrees of north latitude.

Having dined, the party resumed their survey along the southern side of the sound, which took nearly an east direction. They had not far advanced, when about five in the evening they had the joyful satisfaction of meeting Mr. Whidbey and his party as before recited.

Mr. Johnstone stated, that the part of the coast that had claimed his attention during his last excursion is a peninsula, connected with the more eastern land by the last mentioned narrow isthmus, and that it is by no means so high or mountainous as the land composing the adjacent countries on the opposite or north-eastern side of the sound, which at no great distance consisted of very lofty, rugged, dreary, barren mountains, covered with ice and snow; but that the land composing the peninsula was chiefly of moderate height, and produced a noble forest of large and stately pine trees

of clean and straight growth, amongst which were a few berry bushes and some alders. The shores along the bays and arms they had visited were in general low, and presented a probability that if the wood were cleared away, the soil of the country might be advantageously employed under cultivation. These bays and arms abounded with a greater number of salmon and sea otters, than Mr. Johnstone had observed on any other part of the coast; and as they were found in the greatest abundance at the heads of those places, it was inferred that salmon, and other small fish, form a large proportion of the food of the sea otters, which are thus induced to frequent these inland channels, to which at this season of the year such fishes resort.

Mr. Whidbey in his observations on Admiralty island, remarks, that notwithstanding this island seemed to be composed of a rocky substance covered with little soil, and that chiefly consisting of vegetables in an imperfect state of dissolution, yet like the peninsula just adverted to, it produced timber, which he considered as superior to any he had before noticed on this side of America. He also states, that in his two last excursions several places were seen, where the ocean was evidently encroaching very rapidly on the land, and that the low borders extending from the base of the mountains to the sea side, had, at no very remote period of time, produced tall and stately timber; as many of their dead trunks were found standing erect, and still rooted fast in the ground, in different stages of decay; those being the most perfect that had been the least subject to the influence of the salt water, by which they were surrounded on every flood tide: such had been the encroachment of the ocean on these shores, that the shorter stumps in some instances at low water mark, were even with, or below the surface of the sea.

This same appearance has been noticed before in port Chalmers, and on this occasion Mr. Whidbey quotes other instances of similar encroachments not only in Prince William's sound, but also in Cook's inlet; where he observed similar effects on the shores, and is of opinion from these evidences, that the shallow banks occupying so large a part of Gray's harbour, have recently been produced by the operation of one and the same cause: and it is not less reasonable to conclude, that the waters of the North Pacific, have, possibly for ages, had a general tendency to produce the same effect, on all the coast comprehended within the limits before mentioned.

A return of fair and clear weather on the 18th enabled them to see that large tract of broken land lying between Cross sound and cape Ommaney, which has been described as having a range of high mountains capped with snow extending through it; but from these still continuing to have the

appearance of being disunited in several places, it tended to corroborate our former opinion; and although as before we had not had an opportunity of ascertaining the fact, I have been induced to consider the country as being divided into many islands, and have for that reason termed it an archipelago. The strait that separates this land from the eastern shore, which after Lord Chatham, I have called Chatham Strait, Mr. Whidbey considers as likely to be one of the most profitable places for procuring the skins of the sea otter, on the whole coast; not only from the abundance observed in the possession of the natives, but from the immense number of those animals, seen about the shores in all directions. Here the sea otters were in such plenty that it was easily in the power of the natives to procure as many as they chose to be at the trouble of taking. I was also given to understand by Mr. Brown of the Jackal, who followed us through these regions, that the sea otter's skins which he procured there were of an extremely fine quality.

The principal object which His Majesty appears to have had in view, in directing the undertaking of this voyage having at length been completed, I trust the precision with which the survey of the coast of North-West America has been carried into effect, will remove every doubt, and set aside every opinion of a north-west passage, or any water communication navigable for shipping, existing between the North Pacific, and the interior of the American continent, within the limits of our researches. The discovery that no such communication does exist has been zealously pursued, and with a degree of minuteness far exceeding the letter of my commission or instructions; in this respect I might possibly have incurred the censure of disobedience, had I not been intrusted with the most liberal, discretionary orders, as being the fittest and most likely means of attaining the important end in question.

The very detached and broken region that lies before so large a portion of this coast, rendered a minute examination altogether unavoidable: this had frequently the good effect of facilitating the labours of our survey, by its leading us through narrow, shallow, intricate channels, which cut off extensive tracts of broken land, and by thus shewing their separation from the continent, their further examination became unimportant to the object of our inquiry.

For this reason I have considered it essential to the illustration of our survey, to state very exactly not only the track of the vessels when navigating these regions, but likewise those of the boats when so employed, as well when I was present myself, as when they were conducted by Mr. Whidbey or Mr. Johnstone, on whom the execution of that laborious and

dangerous service principally fell, and to whom I feel myself indebted for the zeal with which they engaged in it on all occasions. The perusal of these parts of our voyage to persons not particularly interested, I am conscious will afford but little entertainment; yet I have been induced to give a detailed account, instead of an abstract, of our proceedings, for the purpose of illustrating the charts accompanying this journal; of shewing the manner in which our time day by day had been employed; and, for the additional purpose, of making the history of our transactions on the north-west coast of America, as conclusive as possible, against all speculative opinions respecting the existence of a hyperborean or mediterranean ocean within the limits of our survey.

I shall now conclude the account of our transactions at this place by the insertion of such astronomical and nautical observations as were made during the time we passed at this station.

On the 2d of August in port Conclusion the chronometers shew the following longitudes, viz. Arnold's No. 14, 225° 37′; Arnold's No. 176, 225° 38′; and Kendall's, 225° 34′ 30″; the true longitude being 225° 37′ 30″, it appeared that Arnold's No. 14 was 30′ to the westward, Arnold's No. 176, 30′ to the eastward, and Kendall's 2′ 30″ to the westward of the true longitude.

By eighteen sets of observations taken between the 2d and 18th of August on shore with the artificial horizon, Arnold's No. 14 was found to be fast of mean time at Greenwich at noon on

the 18th of August	4	h	38	,	13	"	30	"
And to be gaining on mean time per day at the rate of,					24		00	
Arnold's No. 176, fast of mean time at Greenwich on ditto	10		13		33		00	
And gaining per day at the rate of,					49		37	
Kendall's fast of mean time at Greenwich on ditto	9		8		30		00	
And gaining per day at the rate of,					26		11	
The mean variation by two compasses and eighteen sets of observations, differing from 24° 9′ to 27° 10′, was	25	0	30	,				
The latitude of the place of observation by four meridional altitudes, taken on shore with the artificial horizon	56		14		55			

## BOOK THE SIXTH.

PASSAGE TO THE SOUTHWARD ALONG THE WESTERN COAST OF AMERICA; DOUBLE CAPE HORN; TOUCH AT ST. HELENA; ARRIVE IN ENGLAND

## CHAPTER I.

Depart from Port Conclusion—Arrival at Nootka— Transactions there—Visit Maquinna at Tahsheis— Astronomical Observations for correcting the Survey between Cape Douglas and Cape Decision.

The preparations that had been made for our departing immediately on the return of the boats, proved of little importance, as the S. E. gale which commenced on the day of their arrival, continued with little variation to blow very violently from the direction in which I purposed to steer, attended with very heavy rain, and thick foggy weather until Friday the 22d in the evening, when the atmosphere became somewhat clearer, and the wind more moderate. Although it continued to be contrary to our pursuit, yet being completely tired of remaining in this inactive solitary situation, I determined to put to sea, and with the Chatham departed from port Conclusion. We plied towards the ocean, but made little progress, as we were still attended by adverse winds and thick foggy weather.

It was not until the morning of Sunday the 24th that we reached the open ocean, in accomplishing of which, we were in imminent danger of losing the vessels about twelve o'clock the preceding night, by being driven on cape Ommaney. The faint variable winds, and the great irregularity of the tides, sat us so near to that promontory, and the rock that lies near it, that it required our utmost efforts in towing to keep the vessels off from the land, and consequently from the inevitable destruction that must have followed. A very heavy western swell at this time broke with great fury not half a mile from us; and as no anchorage, or even bottom could be found, our situation for some time was most seriously alarming; from which however, we were most providentially extricated, by a gentle breeze springing up from the N. W. when in the most perilous and critical state that can be imagined.

This breeze by two in the morning, enabled us to gain a sufficient distance from the shore, to allow the boats, which had been employed in

towing the ship from the rocks, to be taken on board. In the execution of this business we had the misfortune of losing Isaac Wooden, one of the cutter's crew, who unfortunately fell overboard; and although a boat was instantly sent to his assistance, yet as he was no swimmer, and as in falling he unluckily struck his head against the boat's gunwale, he sunk so immediately that no help could be afforded him. This poor fellow had assisted in most of the boat excursions, was highly regarded by his comrades, and much regretted by his officers; in short, he was a good man, and an active sailor; and to commemorate his unexpected and melancholy fate, I named the rock which lies off cape Ommaney, WOODEN'S ROCK.

At day-light we had a fresh gale from the N. W. and having now finally accomplished so much of my commission, as appertained to the discovery of any navigable water communication, from the North Pacific into the interior of the American continent, my attention became directed to the adjustment of those differences that had arisen in my negociation with Sen<sup>r</sup> Quadra as to the cession of Nootka; under the idea that a sufficient time had now elapsed, since the departure of Lieutenant Broughton, for the arrival of the necessary instructions at that place, by which I might be enabled to regulate my future conduct, with respect to the restitution of those territories to the dominion of our Most Gracious Sovereign.

In this expectation our course was directed south-eastward towards Nootka, passing about three leagues to the westward of the Hazy islands; these form a group of small rocky islets a league in extent, lying S. 7 E. at the distance of 16 leagues from cape Ommaney; S. 62 W. from cape Decision; and three leagues west from Coronation island, which is the nearest land to them. At noon the southernmost land in sight, being cape de St. Bartolom, forming the north point of entrance into Puerto del Baylio Bucareli, and discovered by Sen<sup>r</sup> Quadra in 1775, bore by compass S. 87 E.; the nearest shore was a conspicuous promontory, which I distinguished by the name of CAPE ADDINGTON after the speaker of the House of Commons, N. 73 E., distant four or five leagues; Warren's island in the entrance of Clarence's strait, N. 9 E.; mount Calder, N. 1 E.; Coronation island from N. 13 W. to N. 30 W.; and cape Ommaney, N. 44 W. In this situation the observed latitude was 55° 29½', and the longitude, agreeably to the position of several conspicuous stations as fixed by former observations, and now very accurately corresponding, was found to be 225° 58'; but by the chronometers, allowing their rate and error as ascertained at port Conclusion, the longitude was by Kendall's chronometer 226° 4', by Arnold's No. 14, 226° 3′ 45", and by No. 176, 226° 15′ 30"; hence it would

appear, that some alteration in their rate of going had taken place since the last observations were made in port Conclusion, on the evening of the 18th; and particularly in No. 176, which it is necessary to remark, had been there taken on shore for the purpose of observation.

In the afternoon we passed cape del St. Bartolom, which, according to our observations, is situated in latitude 55° 12½′, longitude 226° 34′. From this cape, in a direction S. 21 E. at the distance of 14 miles, and 12 miles from the nearest part of the contiguous shore, lies a very low flat rocky islet, surrounded by rocks and breakers, that extend some distance from it; from these circumstances, and from its being so far distant from the main land, it is rendered one of the most dangerous impediments to navigation that we had met with on the exterior coast; and hence it obtained the name of the Wolf Rock. S. 11 W. from this rock, at the distance of three leagues, lies a small high island, named by Mr. Dixon, Forrester's Island; between these we passed, and so far as we became acquainted with the channel, it appeared to be clear and free from interruption.

After passing Forrester's island (Monday 25) our course was directed towards the north-west point of Queen September Charlotte's islands, with an intention of examining their exterior coast, for the purpose of correcting any error that might have occurred in our former survey; but this we were unable to accomplish, on account of the thick hazy or foggy weather which for the most part obscured the land from our view, and when visible, it was seen but indistinctly. This weather was attended by calms, or light variable winds, so adverse to our pursuit, that it was not until Monday the 1st of September, that we gained sight of the westernmost of Scot's islands. At noon this island bore by compass N. 8 E. and our observed latitude being 50° 21', shewed the longitude to be 230° 35′; but by the chronometers allowing the rate as before stated, Kendall's chronometer gave 230° 46′ 45″; Arnold's No. 14, 230° 45′ 45"; and No. 176, 231° 0′ 15". Now, although we were not positively certain as to the identical part of the island to which these calculations applied, (it being but just visible in the horizon) yet, concluding the longitude as had been ascertained by its bearings, and the observed latitude of the ship to be most correct: the former opinion, that the chronometers had varied since our last observations by them in port Conclusion, was now very much strengthened, as we were thoroughly convinced that no error, either in making the present or any of the former observations, had taken place; the most particular care and attention having ever been observed throughout the whole voyage on all such occasions.

The wind at N. W. gradually increased to a gentle gale, accompanied by clear and pleasant weather, which brought us by six in the evening of the following day, Tuesday the 2d, to an anchor in Friendly cove, Nootka sound; here we found His Catholic Majesty's armed vessels the Princissa, Aransasu, and the St. Carlos, belonging to the establishment at St. Blas, with the Phænix bark, commanded by Mr. Hugh Moor, from Bengal; the sloop Prince Lee Boo, one of Mr. Brown's squadron, commanded by Mr. Gordon from China, who had been employed in collecting furs during the summer upon this coast, mostly to the northward of Nootka; beside these English traders, was the Washington, J. Kendrick, commander, of Boston in America; who had been employed in the same pursuit, but whose vessel was now under repair.

The Princissa commanded by Sen<sup>r</sup> Fidalgo had arrived from St. Blas only the day before, and had brought hither Brigadier General Don Jose Manuel Alava, colonel of the regiment of Puebla, and governor of Nootka.

The appointment of this gentleman as governor of Nootka had taken place in consequence of the death of our highly valuable and much esteemed friend Sen<sup>r</sup> Quadra, who in the month of March had died at St. Blas, universally lamented. Having endeavoured, on a former occasion, to point out the degree of admiration and respect with which the conduct of Sen<sup>r</sup> Quadra towards our little community had impressed us during his life, I cannot refrain, now that he is no more, from rendering that justice to his memory to which it is so amply intitled, by stating, that the unexpected melancholy event of his decease operated on the minds of us all, in a way more easily to be imagined than described; and whilst it excited our most grateful acknowledgments, it produced the deepest regret for the loss of a character so amiable, and so truly ornamental to civil society.

The Discovery having in the course of the day greatly outsailed the Chatham, the latter did not arrive until after dark; for this reason, our formal visit to the governor was deferred until the day following. Mr. Puget had come down the coast from Woody point, much nearer to the shore than we had done; and from him I learned that between the entrance of the sound, and the breakers which are about seven or eight miles to the westward of it, he had met with much sea weed; growing about two miles from the shore in very irregular depths of water, from five to ten fathoms, rocky bottom, until within about two miles of Friendly cove, when the sea weed disappeared, and the depth of water greatly increased.

On Wednesday morning the 3d, we waited upon the governor, who still resided on board the Princissa, where we were received by him and Sen<sup>r</sup> Fidalgo with marks of the most polite and friendly attention. I was soon given to understand by Sen<sup>r</sup> Alava, that his appointment to this government had taken place as above stated for the particular purpose of finishing the pending negociation, respecting the cession of these territories; which, in consequence of the different construction put on the first article of the Spanish convention, of the twenty-eighth of October 1790, by the late Sen<sup>r</sup> Quadra and myself, had, since the month of September 1792, been intirely suspended. The present governor however was still unprovided with the credentials necessary for finishing this business; but on his departure from St. Blas in June, these documents were hourly expected, and a vessel was waiting there in readiness to be dispatched to this port, provided they arrived in time for her reaching Nootka on or before the 15th of October; but in the event of her not being able to effect a passage by that time, she was to repair to Monterrey. In consequence of this arrangement Sen<sup>r</sup> Alava purposed to remain here until that period should arrive; and as no communication from England, either of a public or private nature, had yet reached me, I considered it to be highly probable, that a duplicate of my instructions for the like purpose might be transmitted by the same conveyance.

Under this impression, and the consideration of many other circumstances relative to the situation of both vessels, I thought it most adviseable to determine on remaining till that period with Sen<sup>r</sup> Alava; indeed it was not very likely, from the various important duties we had now to execute, with the inadequate means we possessed for doing so, that we should be enabled to proceed much before that time. Our store of cordage was completely exhausted, nor had we a fathom of rope but what was then in use; the whole of it was much worn, and had been spliced in several places, and therefore it became necessary to contrive some means for procuring a supply before we could venture to sea again. The quantity which our Spanish friends, or the trading vessels in this port, were likely to afford us, was very inadequate to our necessities, which obliged us to resort to the expedient of converting some of our cables into cordage. This would necessarily prove a tedious business, especially as we had to construct a machine for that purpose. The Chatham was not only in a similar predicament with respect to cordage, but she required caulking, and immediate repair in some of her plank, that was found to be rotten. Both vessels demanded many spars to be cut and prepared; the sails and casks stood in need of great repair; and it had become essentially important, that the observatory should be erected on shore, for the purpose of ascertaining more positively the rate and error of our chronometers, in order to correct our survey from cape Douglas to cape Decision; for notwithstanding that I had little doubt in my own mind of the mode that had been pursued, yet I was sensible that corresponding observations at this place would be very satisfactory.

With these objects in contemplation, our time was not likely to be unprofitably employed; and although I would gladly have postponed the execution of these several tasks until our arrival in a more southern clime, where we had reason to believe the weather would be more favorable to our wishes, and where the necessary refreshments of which we all stood so much in need, might have been procured in great abundance; yet it would have been highly indiscreet, and extremely dangerous, for the vessels to have put to sea again, until a supply of cordage could be provided. In addition to this, other circumstances seemed to demand, that I should remain within the reach of any dispatches that might have been forwarded through New Spain; which could only be done by staying here, or resorting to some of the southern Spanish settlements, where we should lose the advantage of procuring the spars and plank which were now required; and as most of our business must have been ill executed on board the vessels, I felt little encouragement, when I reflected on the treatment we had experienced the preceding year from the acting governor of California, to expect being indulged with permission for performing it on shore, in any of the ports under his jurisdiction.

These weighty considerations induced me to resolve on continuing at Nootka until all our important operations were completed; and if in the mean time I should receive any instructions for the government of my conduct, as to the restitution of these territories, by the expected Spanish packet, or by any other conveyance, I should be upon the spot to act with Sen<sup>r</sup> Alava as the nature of my orders might require.

I took an early opportunity of representing to Sen<sup>r</sup> Alava our necessitous condition, and requested his permission to erect our observatory and tents on shore. To this request he gave his most hearty concurrence, and seemed very earnestly to regret, that the state of their establishment precluded him from administering to our wants in that effectual manner, to which he was prompted by his inclinations.

Sen<sup>r</sup> Saavadra, who had remained in charge of Nootka since our former visit, joined our party on board the Princissa, where the day passed in

making inquiries about the civilized world, and in deploring the turbulent and unhappy state of Europe. The melancholy circumstances that had been detailed by Mr. Brown, were now confirmed by these gentlemen to the close of the year 1793; and we became much concerned by the events that had happened, and alarmed at the fatal consequences which it was natural to suppose they must produce.

The weather was gloomy with continual rain, but it did not prevent *Maquinna* and *Clewpaneloo*, with some other chiefs, and a few of the natives, from visiting the vessels. The two former received such compliments as were suitable to their rank, with which they were highly satisfied; and the latter disposed of a scanty supply of fish at a very exorbitant price. Fish had become of great value amongst these people, as, either from the badness of the season during the preceding summer, or from their neglect and inattention in providing their usual supply for the winter, they had experienced the greatest distress for want of provisions during that period; and had not Sen<sup>r</sup> Saavadra administered to their relief, many of them would probably have fallen a sacrifice to the scarcity. And although the provident care he had taken was inadequate to all that was demanded of him, yet the assistance he had been able to afford them, was, much to the credit of the natives, acknowledged by them with the most grateful expressions.

The governor, Sen<sup>rs</sup> Fidalgo, Saavadra, and some others of the Spanish officers, honoured us with a return of our visit on Thursday morning the 4th; but in consequence of our reduced stock of powder, I was under the necessity of declining the usual ceremony of saluting, which was very politely excused and dispensed with by the whole party.

The weather continued very rainy and unpleasant until Saturday morning the 6th, when the clouds dispersed with a breeze from the westward, and the weather became clear and agreeable. The tents, observatory, and instruments, were now set on shore; the sails dried and unbent, and our various services were put in a train for execution, in which we were assisted by some Spanish caulkers and carpenters, who were employed on board the Chatham; and on Monday following, the 8th, having constructed a machine, we began making rope from the materials of a new bower cable.

Whilst the wind continued in the western quarter, it regularly died away every evening; and though the night light airs prevailed from the land, which were succeeded by the refreshing westerly breeze from the sea in the day time, accompanied by cheerful pleasant weather; which, with the advantage

of the society we here met, made our time pass as agreeably as could well be expected in these rude and distant regions.

On Wednesday the 10th the wind again blew fresh from the S. E. and exhibited another of the very rare instances of lightning and thunder in this country, which with torrents of rain continued most of the night.

The wind returned again to the westward on Thursday evening the 11th, and brought with it fair and pleasant weather; with which the Aransasu sailed for St. Blas, and through Sen<sup>r</sup> Alava's civility, I transmitted by this opportunity a letter to the Admiralty, stating our having accomplished the survey of North-West America, and the expectation I was in of receiving their final instructions for the accomplishment of the other objects of my commission.

Both wind and weather, as might reasonably be expected on the approach of the autumnal equinox, became now very changeable; on the 13th the atmosphere was dark and gloomy, with drifting showers; and the wind from the S. E., which in the afternoon suddenly shifted to the N. E., blew in heavy squalls, accompanied by a very heavy fall of rain. Notwithstanding that the wind came directly from the land, yet towards midnight, when the gale seemed to be at its height, an extremely heavy swell rolled in from the ocean, and broke with great fury on the shores of the sound that were exposed to its influence; and even those of this little cove were by the surge greatly annoyed. This kind of weather continued until Wednesday the 17th, and much retarded our several works, which could not yet be considered as in any state of forwardness. The violence of the equinoctial gales from this time seemed to have abated, and a series of fair weather, with regular land and sea breezes, enabled our people to make all the progress that the tedious nature of their several labours would permit.

Since our arrival we had occasionally been visited by *Maquinna*, *Clewpaneloo*, with some of the inferior chiefs, and many of the inhabitants, who sold us a few fish, and brought to market some venison; but most of these people had now retired to their winter habitations up the sound. These Sen<sup>r</sup> Alava expressed a desire to visit, and as we all knew that such an excursion would be highly flattering to *Maquinna*, and to the other chiefs and people, a party was formed with three of our boats, and a Spanish launch to carry the luggage. Notwithstanding that we were well persuaded of the friendly disposition of the natives, yet I considered it necessary that the boats should be equipped for defence, as on all other such occasions. The

settled state of the weather had now not only favored and forwarded all our transactions, but was extremely inviting to the relaxation we had in view.

Sen<sup>rs</sup> Alava and Fidalgo, with Mr. Menzies, accompanied me in the Discovery's yawl; Mr. Puget, attended by some of the officers of the Chatham, was in the cutter; Lieutenant Swaine, with some of the gentlemen of the Discovery, were in our large cutter; and with those in the Spanish launch, our party consisted of fifty-six officers and men. No doubt was entertained that Maguinna, who had been informed of the honour intended him, would be in readiness to receive us, and for this reason our course was first directed towards Tahsheis, the place of his residence. But as we were not much assisted by the wind, it was near sun-set before we arrived at a very pleasant spot not far from Maquinna's village, where we pitched our tents; and as the day was too far advanced, our ceremonial visit was deferred until the next day, and a message to that effect was sent by Clewpaneloo, who had attended us from the ships. But Maguinna, who with his people was in readiness to receive us, instantly dispatched a messenger, requesting that we would repair to his residence that evening. This however we thought proper to decline, but in order that Maquinna might be satisfied of our intentions to visit him in the morning, some of the gentlemen walked to the village, and explained to him, that it was the lateness of the hour only that prevented our then complying with his request.

Matters being comfortably arranged for the night, centinels were planted, as well to avoid any surprize from the natives, as to prevent our own people from straying to their habitations, from whence disputes or misunderstandings might have arisen; strict orders were issued to this effect, and being uniformly adhered to, the night passed without the least interruption.

After breakfast on Friday morning the 26th, we proceeded with the four boats to Tahsheis, and were welcomed on our approach to the shore by a vociferous old man, exclaiming "Wacosh, Wacosh;" by which he meant to express friendship, and the good intentions of the natives towards us. These sentiments being returned in a similar manner by our party, we landed, and were received by Maquinna and two of his brothers, Whaclasse pultz, and Tatoochseatticus, with repeated expressions of "Wacosh," until we were almost stunned with their gratulations. This ceremony being concluded, we were conducted through the village to Maquinna's habitation, where we were led to seats prepared and covered with clean mats at the upper end of the house.

Having taken our seats, about thirty men began each to beat with a stick on a hollow board, in order to assemble the inhabitants of the village to that spot; this summons being readily obeyed, Maguinna informed the assembled crowd with great earnestness, and in a speech of some length, that our visit was to be considered as a great honour done to him, and that it had taken place in consequence of the civil and orderly behaviour of all the inhabitants of the sound under his authority towards the English and the Spaniards. This, he observed, was not the case with Wicananish, or any other chief whose people committed acts of violence and depredation on the vessels and their crews that visited their country; but that such behaviour was not practised at Nootka, and that for this reason they had been more frequently visited: by which means, their wealth in copper, cloth, and various other articles of great value to them, had been increased far exceeding that of any of their neighbours. He particularly mentioned some tribes, but by appellations we were not acquainted with, over whom he seemed to consider our visit to him as a great triumph; and from his manner of speaking, there evidently appeared to exist no small degree of jealousy between them. He then proceeded to enumerate the various good qualities that marked the character of the Spaniards and the English; that both were strongly attached to himself and his people, and that he hoped that we should be much pleased by being entertained according to their manner of receiving visitors.

The performers I believe were all in readiness without, and anxious to begin their part; for the instant Maquinna had ceased speaking, the hollow board music recommenced, and a man entered the house most fantastically dressed in a war garment, which reached to the calves of his legs, but not below them; this was variously ornamented, as was also his face with black and red paint, so that his features appeared to be most extravagantly distorted, or, more properly speaking, they were scarcely distinguishable; his hair was powdered, or rather intirely covered with the most delicate white down of young sea fowl, and in his hand he bore a musket with a fixed bayonet, making altogether a most savage, though at the same time a whimsical figure; this man was followed by about twenty more, decorated with considerable variety after the same fashion, but differently armed; some like himself with muskets, others with pistols, swords, daggers, spears, bows, arrows, fish-gigs, and hatchets, seemingly with intent to display their wealth and power, by an exhibition of the several implements they possessed, as well for the use of war, as for obtaining the different necessaries of life.

This preposterous group of figures was drawn up before us; and notwithstanding we were perfectly satisfied of the harmless and peaceable

intentions of these people, yet I believe there was not one of our party intirely free from those sensations which will naturally arise from the sight of such unusual objects; whose savage and barbarous appearance, was not a little augmented by their actions and vociferous behaviour, accompanied by an exhibition, that consisted principally of jumping in a very peculiar manner. In this effort the legs did not seem to partake much of the exertion, although they sometimes raised themselves to a considerable height; and we understood that those were considered to be the best performers, who kept their feet constantly parallel to each other, or in one certain position, with the least possible inclination of the knees. After these had finished their part, Maguinna performed a mask dance by himself, in which, with great address, he frequently and almost imperceptibly changed his mask; this seemed to be a very favorite amusement of his, as he appeared to be in high spirits, and to take great delight in the performance. The masks he had made choice of, certainly did credit to his imagination in point of whimsical effect; his dress was different from that worn by any of the other performers, consisting of a cloak and a kind of short apron, covered with hollow shells, and small pieces of copper so placed as to strike against each other, and to produce a jingling noise; which, being accompanied by the music before described as a substitute for a drum, and some vocal exertions, produced a savage discordant noise, as offensive to the ear as the former exhibition had been to the eye. But as the object of our visit was a compliment to Maquinna, a previous determination to be pleased insured our plaudits, which were bountifully bestowed, and received with great pleasure and satisfaction by the surrounding spectators.

A pause now took place in the entertainments, which however was soon filled up, to the great gratification of our host and his friends. The presents that had been provided for the occasion were now exhibited to public view, consisting of copper, blue cloth, blankets, ear shells, and a variety of small articles of less value; these were severally distributed by Sen<sup>r</sup> Alava and myself to *Maquinna* and his relations, according to the rank and consequence of each; in these tokens of our friendship we succeeded so well, that our liberal donations soon resounded through the village, and the glad tidings were received with loud acclamations of applause. On these subsiding, we had a second vocal and instrumental performance, which concluded by a return from *Maquinna* for the presents we had made. In this *Maquinna* did not personally appear; *Whaclasse pultz*, acting as master of the ceremonies, first addressed Sen<sup>r</sup> Alava in a short speech, respecting the friendship that had so long been established between the Spaniards, and the tribes under the authority of *Maquinna*, who, he said, was highly pleased by

the trouble he had taken in paying him this distant visit; and that, as a proof of *Maquinna's* sincerity, he was then about to make some return for the repeated instances of friendship he had experienced, by placing a sea otter skin at the feet of Sen<sup>r</sup> Alava. I then received a similar compliment, as did Sen<sup>r</sup> Fidalgo and Mr. Puget, after which Sen<sup>r</sup> Alava and myself were each presented with a second sea otter skin, which concluded the ceremonies of this visit.

The day was not yet far advanced; and being fair and pleasant, we amused ourselves in strolling through the village; and found it, although extensive, far from being numerously inhabited. This was accounted for by Maguinna, who stated, that many families were still absent, not having yet procured their stock of provisions for the ensuing winter season; at which time, if all their habitations are fully occupied, its population cannot be much less than eight or nine hundred persons. Maquinna's habitation was considerably larger than any of the others, and had a very superior advantage over them all by being less filthy; it was at present not more than half occupied, nor was it intirely covered in, though it did not appear to have been recently erected; but we remained ignorant of the reason why so large a proportion of the roof remained unfinished. The construction of the Nootka houses, especially with respect to their inside, has been so fully treated by Captain Cook, as to preclude any material addition from my pen; yet it is singularly remarkable, (although particularly represented in Mr. Webber's drawing of the village in Friendly cove) that Captain Cook should not have taken any notice whatever in his journal, of the immense pieces of timber which are raised, and horizontally placed on wooden pillars, about eighteen inches above the roof of the largest houses in that village; one of which pieces of timber was of size sufficient to have made a lower mast for a third rate man of war. These, together with the large images, were at that time supposed to denote the habitation of the chief, or principal person of the tribe; and the opinion then formed, has been repeatedly confirmed by observations made during this voyage. One or more houses in many of the deserted villages, as well as in most of the inhabited ones we had visited, were thus distinguished. On the house of Maquinna were three of these immense spars; the middle piece was the largest, and measured at the butend nearly five feet in diameter; this extended the whole length of the habitation, which was about an hundred feet long. It was placed on pillars of wood; that which supported it within the upper end of the house was about fifteen feet in circumference, and on it was carved one of their distorted representations of a gigantic human figure. We remained totally unacquainted with the intention of, or the purpose that was to be answered

by, these singular roof trees; but it is natural to suppose that they must be directed to some important object, as the raising of such immense masses of timber twelve or fourteen feet from the ground, and placing them firmly on the pillars by which they are supported, must, to a people so totally devoid of mechanical powers, be a most tedious and laborious operation.

Our curiosity being satisfied, and our pockets completely emptied by the unremitting solicitations of the inhabitants of Tahsheis, of the stock of trinkets with which we had been provided, we proceeded to the upper end of the arm, which afforded me an opportunity of explaining to Sen<sup>r</sup> Alava the manner, in which the numerous channels and branches in the continent he had seen delineated on our charts, terminated; as this ended in the same way, by a low border of land in the front of a valley, through which some small streams of water were discharged; but the adjacent shores were infinitely less high than we had been accustomed to observe; where having strolled a little about in the skirts of the woods, we returned to our encampment. Here we found Maguinna with several of our Tahsheian friends, who were very solicitous that we should return and partake in the evening of an entertainment similar to that we had received in the morning; but as we had appointed to be at home on Sunday morning, and had promised a visit to our friend Clewpaneloo at his principal residence, called Mooetchee, which was at a considerable distance from Tahsheis, it was not in our power to comply with the civil solicitations of Maguinna and his fraternity.

We were honoured at dinner with the company of *Maquinna*, most of his family, and many of the other chiefs; who, with the most unequivocal assurances of their friendship, and with expressions of the great pleasure they had derived from our visit, bad us farewell after dinner, and we departed.

As Mooetchee is situated near the upper part of the next branch to the eastward of Tahsheis channel, our route was directed back by the way we had come; and having reached in the evening the dividing point of these two arms of the sea, which is situated about N. 6 E. six or seven miles from Friendly cove, we pitched our tents for the night, in order to have the day before us for visiting *Clewpaneloo*, whose habitation was about seven or eight miles from us; towards which place, after breakfast, on Saturday morning the 27th, we proceeded; and as our visit was not intended to be a very long one, the Spanish launch was left in a pleasant situation, in order to pitch the encampment, and provide a dinner against our return; by which means our journey to the ship the next day would be materially shortened. Our progress was not very rapid, as both wind, and the stream which I

believe in general runs down, were adverse to our pursuit, which was through a region so wild and inhospitable in its appearance, as occasioned Sen<sup>r</sup> Alava frequently to express his astonishment, that it could ever have been an object of contention between our respective sovereigns. The shores either constituted impenetrable forests, produced from the fissures of a rugged rocky country, or were formed by stupendous barren precipices, rising perpendicularly from the water to an immense height; so that, excepting the ice and cataracts to which we had been accustomed in many other instances, Sen<sup>r</sup> Alava was enabled from this short excursion to form a very complete idea of the general character of those countries to the northward of this station, which had so long occupied our time and labour.

It was nearly three in the afternoon before we reached the village of Mooetchee, which consisted of a few houses huddled together in a cove, with as little regularity in the disposal of them as was apparent in the conduct of its inhabitants, who crowded about us, and produced us much inconvenience, although with the most inoffensive and peaceable design. Our friend Clewpaneloo, though their chief, seemed not to possess sufficient influence to restrain this behaviour, even within his own habitation, to which we were conducted by a very narrow passage between the houses; the filth of which, and the combination of so many offensive exhalations, rendered it highly necessary to our feelings, that as much dispatch as possible should be used in the distribution of our presents, which, when effected, would leave us perfectly at liberty to depart, without giving the least offence to our host or to any of his friends. On this occasion, ceremonies similar to those practised at Tahsheis were here observed; but the want of order and decorum, independently of the difference in point of numbers between Tahsheis and Mooetchee, evinced the superiority of Maquinna's authority, when compared with that of the neighbouring chiefs; amongst whom Clewpaneloo was reputed to be one of the first in wealth and power; and I certainly noticed as many of their large square boxes, in which they generally keep their valuables, in his habitation, as I had done in almost all the other houses collectively taken, but what they contained we did not intirely learn; yet, if credit were to be given to our landlord, they were all well appropriated, being, according to his account, filled with the skins of the sea otter, bear, deer, martin, and other animals of the country, or with copper, iron, cloth, and other European commodities.

Our part being performed, and our store of presents exhausted, we returned to our boats, accompanied by *Clewpaneloo*, who made us in return presents similar to those we had received from *Maquinna*; to which he

added one infinitely more valuable than all the rest. This was a very fine buck, just killed; which being deposited in our boat, we took leave of Mooetchee, amidst reiterated acclamations of "Wacosh, Wacosh," with repeated intreaties of the most friendly nature to prolong our stay; but as the day was now far advanced, no time was lost in making the best of our way towards the station where the Spanish launch had been left; this we reached in the evening, and found every thing comfortably prepared for our reception.

As we bent our way homewards the next morning, we stopped at an anchoring place called by the natives Mowenna, in great repute with the traders on this coast, and particularly so with the Americans. It is situated on the western side of the sound, between four and five miles to the northward of Friendly cove, over which it possesses (though further from the sea) several advantages in point of security and accommodation. The land in its neighbourhood continues to be low to a greater distance than about Friendly cove, and seems to be composed of less rocky materials. The extent of this harbour is but small, but being well protected against all winds, and its distance from the ocean preventing its being much affected by the swell, several vessels might ride here in perfect safety; and as it has a fair navigable channel out of it in a southerly direction, vessels can sail out of this harbour whenever the land wind prevails to push them clear of the sound, with infinitely more ease than from Friendly cove; out of which, they are first obliged to warp a considerable distance, and to anchor not only in an inconvenient depth of water, but on an uneven rocky bottom; in addition to which, in the event of the wind suddenly setting in strong from the sea, their situation becomes by no means pleasant. The departure from Friendly cove, although not difficult in the summer season, yet (as I have been given to understand) is subject in the winter to great, and indeed dangerous, inconvenience, from the heavy sea which rolls in stormy weather into the sound; especially during the S. E. gales, against which, from its vicinity to the ocean, it is not sufficiently protected. As a military establishment however, it is greatly to be preferred to Mowenna, as nothing can pass or repass into the sound unobserved at Friendly cove.

About noon we arrived on board. Nothing of any moment had occurred during our absence; the weather, which had been favorable to our excursion, had been so likewise to the several employments of re-equipment, though we had yet much remaining to perform.

On Monday afternoon the 29th, arrived a very small ship called the Jenny, belonging to Bristol; the same vessel that had visited Nootka in

October, 1792, then rigged as a three-masted schooner, and commanded by Mr. Baker, who had proceeded in her to England, with the cargo of furs he had then collected. She was now commanded by a Mr. John Adamson, who had returned with her from England, and had in the course of the preceding summer in the neighbourhood of Queen Charlotte's islands, collected upwards of two thousand sea otter skins, with which he was bound to the Chinese market, and from Canton was to be employed as packet in the service of the East India Company. He brought us the agreeable intelligence of having met Mr. Brown in the Jackal on the coast, in the latitude of 54°, for whose safety we had entertained some apprehension; for when we left Mr. Brown in port Althorp, it was his intention to proceed to the southward through the inland navigation, and as the inhabitants of those shores had acted a very suspicious part towards Mr. Whidbey, we were fearful lest Mr. Brown's small force might not have been equal to his protection.

The serenity of the weather continued to favor our operations with little interruption. The wind blew for a few October 1794 hours on the afternoon of Tuesday the 30th, from the S. E. attended with rain; but the N. W. wind again prevailed, and the weather became fair and pleasant the next morning, Wednesday the 1st of October.

On the day following, Thursday the 2nd, I was honoured with the company of the Governor, Sen<sup>rs</sup> Fidalgo, Saavadra, and most of the Spanish officers to dine on board the Discovery. The very exhausted state of my stores, and stock of articles necessary on such occasions, had precluded my receiving this pleasure so frequently as I could have wished.

I was very agreeably surprized by receiving a message from the governor on Saturday the 4th, in the afternoon, purporting that the expected Spanish packet from St. Blas was in the offing; these however were but short-lived hopes, for we no sooner had recourse to our glasses, than we became of opinion that the vessel in question was the Jackal. But as the wind at this time blew strong from the S. E. attended with dark, rainy, hazy weather, and as she could not reach the port before dark, she stood to sea again; during the night the S. E. gale increased with incessant rain, and a very heavy swell rolled into the sound; the next day, Sunday the 5th, the weather was more moderate, and in the evening the Jackal arrived. It was now that I received the information of Mr. Brown's having passed through the shallow passage mentioned in Mr. Whidbey's last survey in the boats, which appertaining immediately to the region then under consideration, I thought it most properly introduced in the narrative of that expedition. Since our separation with the Jackal, Mr. Brown had collected upwards of a

thousand prime sea otter skins, and several of inferior quality. Most of these had been procured from those people, whose conduct had put on such a suspicious appearance in the opinion of Mr. Whidbey and his party, in his way from Cross sound: they had behaved very properly to Mr. Brown, whose readiness to enter into a traffic with them might probably operate in gaining their good opinion; for it had been evident, on many occasions, that our disinclination to a commercial intercourse had excited the displeasure of several tribes we had met with; this opinion was confirmed, by their usual formalities on first visiting the vessels, which generally concluded with a desire to open a negociation for the disposal of their merchandize.

As the month of October advanced, we knew perfectly well, both from our former and present experience, that the summer season of this country was fast drawing to a conclusion, and as most of our material business with the shore was now nearly finished, I took the advantage of Monday, being a fair day, to receive on board the observatory instruments and tents. Our fuel and water was yet, however, to complete, which would unavoidably detain us three or four days longer, so that waiting the stipulated time, after which the Spanish packet was not to be expected, could now be of little moment, when compared to the importance her arrival might possibly be of, in expediting our return to England. This, however did not happen, nor did any circumstance worthy of notice take place during this anxious interval. At midnight on the 16th we put to sea, in company with the Chatham. The Princissa, Captain Fidalgo, with Governor Alava on board, was to follow us the next day. Monterrey was appointed as the next rendezvous, where these officers entertained little doubt of our meeting a reception, and every respect suitable to our situation and wishes. In this opinion I was induced to concur, from a conversation that had lately passed between Sen<sup>r</sup> Alava and myself, when I became acquainted that the representation I had made to Sen<sup>r</sup> Ouadra of the treatment we had received on our former visit to New Albion, had in consequence of his decease been transmitted to the viceroy at Mexico, whose very humane and liberal intentions towards us, had no doubt, been materially misunderstood by Sen<sup>r</sup> Arrillago.

Having bad farewell to Nootka, and made such remarks on our ordinary transactions there as appeared to me deserving attention, I shall now proceed to state the result of our labours at the observatory, and shew from what authority I deduced the longitude of the various stations in our late survey, which in many instances differs materially from the longitude assigned to them by Captain Cook. I have already stated my reasons for subscribing to our own calculations in preference to those made by Captain Cook; and

must again repeat, that I have presumed so to do, under the conviction of our having had the means of being accurate, more fully in our power than fell to the lot of that renowned and illustrious navigator.

On September 6th, in Nootka sound the chronometers shew the following longitudes; viz. Arnold's No. 14, 232° 32′ 50″; Arnold's No. 176, 232° 32′ 53″. The true longitude being 232° 31′ 30″, it appeared that Arnold's No. 14, and Kendall's, were each of them 1° 0′ 40″, and Arnold's No. 176, 44′ 25″ to the westward of the true longitude.

On the 6th of October at noon, Arnold's No. 176 was found by the mean of twenty-nine days equal altitudes, to be

fast of mean time at Greenwich	10	h	49	,	45	"	56	""
And to be gaining on mean time per day at the rate of,					41		57	
Arnold's No. 14, fast of mean time on the same day,	4		57		10		56	
And gaining on mean time per day at the rate of,					23		4	
Kendall's, fast of mean time on ditto,	9		30		52		56	
And gaining on mean time per day,					28		30	

By observations taken on shore with the artificial horizon, between the 6th of September and 11th of October, 1794, the chronometers were found to be gaining on mean time, viz. Arnold's No. 176, 41" 57"; Arnold's No. 14, 23" 6"; and Kendall's, 28" 29" per day; by which it appeared, that when opportunities did not offer of obtaining equal altitudes for ascertaining the rates of the chronometers, common altitudes if taken with care, would answer the same purpose; this is exemplified by the above observations, as the difference of the rate between two of the chronometers was only one fourth, and that of the other, viz. Arnold's No. 176, rather more than half a second, which is accounted for by the very unequal rate in general of that chronometer.

The latitude, longitude, variation, and inclination of the magnetic needle, were found to be the same as on our first visit to this place in the year 1792.

## CHAPTER II.

Depart from Nootka Sound—Violent Storm—Arrive at Monterrey—Receive on board the Deserters from the Chatham and Dædalus—Excursion into the Country—Examine a very remarkable Mountain—Astronomical and Nautical Observations.

A light breeze from the land favored our progress out of Nootka sound, and by day-light on Friday the 17th, we were about three leagues from the land, when the wind suddenly died away, and was succeeded by a calm with thick hazy weather continuing the whole of the day, and giving the vessels an appearance of being stationary; the depth of water continued to be the same from noon until midnight, 75 fathoms, muddy bottom. At this time the haze was succeeded by a very thick fog, without the least breeze of wind; and although by the depth increasing we imagined that we were proceeding from the coast, yet our motion was so slow, that by six in the evening of Saturday the 18th, we were still in soundings at the depth of 100 fathoms, muddy bottom, and by the lead when on the ground, the vessel seemed to lie as if at anchor. This obscurity in the atmosphere had prevented our seeing the Chatham since the preceding evening, but the serenity of the weather, and the apparent stationary situation of the Discovery, made me conclude that she could not be far off. Our powder being much exhausted, the fog signal had not been made; but in order to ascertain the fact, a gun was now fired, and to our great astonishment it was not answered. The fog and calm still continued, and the depth of water gradually increased, at eight o'clock we had 105 fathoms, with sandy bottom. The fog now dispersed, and the calm was succeeded by a light breeze from the E. N. E.; another gun was now fired, and a false fire burnt as a signal to our consort, but neither was answered. After repeating these signals in the same manner, at three o'clock on Sunday morning the 19th to no effect, we made all sail, steering to the S. S. E. At day-light the high land over Nootka and Clayoquot, was still in sight, bearing by compass from N. 6 W. to E. N. E.; our distance from the coast was 10 or 12 leagues. The soundings we had gained at midnight at the depth of 135 fathoms, proved to be at the distance of about seven leagues from point Breakers, and something more from the general line of the coast to the eastward of that point. This I considered to be the edge of a bank of soundings that appeared to lie along the coast, which commenced abreast of cape Look-out, and terminated a little to the northward of Nootka. Near the

entrance of De Fuca's straits it seemed to stretch further into the ocean, as at the distance of eight leagues from those shores we had only 58 fathoms water, with muddy bottom.

In looking round for the Chatham a vessel was discovered a-stern, for which we immediately shortened sail, but soon finding it to be the Spanish ship Princissa, we again directed our course as before with all sail spread to a pleasant easterly breeze and fair weather; with this however we were not long indulged, for in the evening the wind veered to the S. S. E., and by Monday the 20th in the afternoon, increased to so strong a gale as to oblige us to close-reef our topsails. The wind fixed in the south-eastern quarter, and became variable, with sometimes clear, and at others cloudy weather: this gale did not reduce us below our topsails, although we plied not only against it, but against a very heavy south-westerly swell to so little purpose, that by noon on Friday the 24th we had by our reckoning (for we were unable to gain any observation) only reached the latitude of 47° 12′, longitude 232° 12'. In the evening the wind veered to the S. S. W., with which we made a tolerably good progress to the south-eastward until Sunday morning the 26th, when it became light and variable, with alternate calms, and a very heavy swell from the W. S. W.

This uncomfortable weather was succeeded by a fresh breeze from the N. E., which as usual veered to the S. E. on Monday morning, and in the afternoon increased to a gale so violent, as to make it necessary that we should strike the top-gallant masts, and bring to, under the storm staysails; this gale was attended with an extremely heavy rain until midnight, when the storm suddenly moderated, and the wind veering to the S. W. we stood to the S. E. under our courses and close-reefed topsails.

The observed latitude on Tuesday the 28th was 44° 14′, longitude by account 233° 27′; in the afternoon all our canvass was again spread, but by Wednesday morning the 29th the wind had resumed its south-eastern direction, with hard squalls and heavy rain, which again reduced us to the foresail and storm staysails.

Since our departure from Nootka we had constantly been incommoded by a very heavy westerly and south-west swell, which at this time was greatly increased, notwithstanding the sea, raised by the violence of the wind from the south-east; these together caused a very confused agitation of the ocean, and although the ship was made as snug as possible by the topgallant masts being struck, and by every thing, that conveniently could be taken from aloft, yet she was extremely uncomfortable, and shipped great quantities of water. About noon the gale moderated, and on the wind returning to the S. W., we again made sail to the south-eastward. The afternoon was tolerably fair; vast flocks of wild geese and ducks were observed, flying to the southward, which indicated that in a more northern climate the winter had set in with much severity.

The wind, although variable between S. E. and S. W. was frequent calms, and the November with 1794 comparatively speaking with that we had so recently experienced, might be considered as tolerably fair, notwithstanding which, we made little progress until Monday morning the 3d of November, when the wind seemed fixed in the north-west quarter, with very pleasant weather. To this favorable gale we spread all our sails, steering for cape Mendocino; the southern promontory of which, at noon, bore by compass S. 51 E., and with the coast to the north of it, in sight to the N. E., was about 9 or 10 leagues distant. The observed latitude 40° 42′, longitude according to our former calculations of the situation of cape Mendocino, 235° 30', the variation 14° eastwardly.

At this time the longitude by the chronometers agreeably to the Nootka rate, was by Kendall's, 235° 27′; Arnold's No. 14, 235° 22′; and No. 176, 235° 55′.

As we drew in with the shores of the northern part of the cape, having since noon steered S. E. by compass about three leagues, we suddenly came into discoloured water, with a very irregular sea; but soundings could not be gained with the handline, nor at the rate we were then going, could bottom have been reached at a greater depth than from 7 to 10 fathoms.

As I intended before we proceeded to Monterrey to visit the bay of Sir Francis Drake, and from thence in our boats to acquire a better knowledge than we had hitherto gained of port Bodega, our course after passing this promontory was directed along the coast to the south-east for that purpose.

In the evening about sun-set a very singular appearance was observed over the interior mountains, immediately behind the high land of this lofty projecting promontory. An immense body of very dense clouds enveloped the summits of those mountains, rising in a confused agitated state like volumes of steam from a boiling cauldron of great magnitude; these expanded to the northward, and obscured all that part of the horizon, whilst to the southward, it was perfectly clear and unclouded. From our own experience, as well as from the information we had derived from the Spaniards, we had long been led to consider cape Mendocino as situated on the divisionary line between the moderate and boisterous climates of this

coast. For this reason, however unscientific it may appear, we could not avoid entertaining an idea, that from the immense accumulation of exhalations, which the stupendous mountains in this immediate neighbourhood arrest, arose those violent south-east storms, with which, further to the northward, we so frequently contended, and by which, the coast of New Albion to the southward of this station, is certainly but seldom, and never in so violent a degree affected. This extraordinary appearance inclined us to believe that some turbulent weather was not far remote, but from what quarter we could not guess, as the steady favorable north-west gale, and the appearance of clear and settled weather, in the direction we were steering, did not give us reason to apprehend any inconvenience from the wind shifting to the south-eastward; and its blowing from the opposite point had always been considered as the harbinger of moderate and pleasant weather. This general rule was on Tuesday morning the 4th partly confirmed, and partly contradicted, as the vapours we had observed collecting on the preceding evening, were now found to have been destined to discharge their fury from a quarter we had least expected. During the night we had made such progress along the coast, that by four in the morning it became necessary to haul to the wind, in order that we might not overshoot our intended port before day-light. At this time the wind at N. N. W. attended with a most tremendous sea from the same quarter, had increased to such a degree of violence, as allowed us to haul off the shore under our foresail and storm staysails only; but the foresail, though a very good one, not being able to resist the violence of the storm, was about sunrise on Wednesday the 5th, blown nearly to pieces; this was immediately replaced with the best we had, the top-gallant masts were struck, and the ship made as snug as possible; but unable to scud with safety before the storm, we lay to, with the ship's head to the westward, under the storm staysails, it being impossible to show more canvass, and of course too hazardous to steer for that part of the coast I wished to make, or to attempt running under our bare poles into a port, of which we had so little knowledge as that of the bay of Sir Francis Drake; to keep the sea, was therefore our only prudent alternative.

During this storm I felt a high degree of satisfaction, that we had not made a more speedy passage from Nootka to Monterrey, as from the direction in which it had blown, I considered, that had we been arrived in that port, we should have been exposed to the whole of its fury, and the violence of the sea that had attended it. As Monterrey was now lying S. 50 E. of us, I could not suppose from the distance of that port, that the gale had not reached so far, for excepting the storms we experienced at and off New

Zealand, this was certainly the most violent of any we had met with during this voyage; the ship however was by no means so uncomfortable as we had found her on many other occasions. The waves, although extremely high, were long and regular, the sky was hard and clear, and intirely free from clouds. About the horizon and a few degrees above it, was seen a bright glaring haze; and as this at intervals became more perceptible, the violence of the wind was constantly observed to be increased.

In this situation we remained until the storm moderated, though it still blew extremely hard: we now wore and stood for the land under the foresail and storm staysails, in the hope, that by the time we should arrive near the shore, now at the distance of 45 leagues, the violence of the storm would in a great measure have abated. It was not however before ten at night that it had sufficiently moderated to allow of our setting the close-reefed topsails; at midnight we had the top-gallant sails set for about an hour, but the wind soon again increased, and seeing the land at no great distance about two o'clock in the morning of Tuesday the 6th, we hauled off shore, and plied under an easy sail to wait the return of day, when finding ourselves about three or four leagues from point Anno Nuevo, point Pinos in sight bearing by compass S. E. ½ E. and having a moderate breeze with fine pleasant weather, we steered for Monterrey, where about two in the afternoon we anchored, and moored nearly in our former situation.

Here we found the Chatham, she having arrived in the evening of the 2d. By Mr. Puget I was informed, that whilst we were becalmed and stationary off Nootka, the Chatham on the evening of the 17th of October was favored with a light breeze from the eastward, which gradually increased; with this Mr. Puget steered to the south-east, concluding we were doing the same, and he was not undeceived until noon of the 18th, when the fog with them had sufficiently dispersed, to shew that the Discovery was not within their visible horizon. Mr. Puget was equally at a loss with ourselves, to account for the separation that had then taken place; but as he considered that we had preceded the Chatham, and she having at that time a pleasant breeze from the eastward, he thought it most adviseable to make the best of his way to the southward, and on the 19th in the morning whilst he continued to be within sight of Nootka, the Chatham had increased her distance near 40 leagues from the shore. This circumstance, in consequence of the succeeding winds, afforded the Chatham a superior advantage in getting to the southward, and which in all probability was considerably augmented, by her having stood further from the coast to the south-westward, than we had done during the prevalence of the south-easterly winds. On reference to the journals it appeared Mr. Puget had been enabled so to do, by the wind having been much further to the southward with the Chatham than with the Discovery; by which means on the wind's shifting to the S. W. as is most frequently the case after the south-easterly gales, our consort made much better slants along the coast to the southward, than we were able to do, because we were so much nearer to it. The Chatham had to contend with nearly the like boisterous weather we had experienced until she had passed cape Mendocino on the 30th of the preceding month; when, at the distance of 40 leagues from the cape the weather was pleasant, with westerly and north-west winds. The greatest distance she had on this passage been from the coast, was stated by Mr. Puget at 93 leagues from cape Disappointment, and from thence, southward to cape Mendocino from 60 to 70 leagues; the greatest distance we had been from the coast did not exceed 78 leagues off Destruction island, but to the southward of cape Look-out we were not more than from 16 to 40 leagues from the land.

The north-west storm we had so lately contended with, and to which I had considered this anchorage as dangerously exposed, Mr. Puget informed me had been here felt, at the same time; but that the gale had been principally from the westward; and although it certainly blew strong, yet it neither prevented the usual communication with the shore, nor would have caused any apprehension for the security of vessels riding in the bay, if tolerably well provided with anchors and cables. Indeed the Chatham rode it out, with cables that had been long in use, and were in the last stage of being serviceable. This was by no means an unpleasant fact to ascertain, as it tended to prove, that although the weather may be extremely boisterous out at sea, and in the offing, yet this bay may be approached with the greatest facility, and will afford extremely good shelter against those winds, to which, apparently, it is most exposed.

Our professional inquiries being mutually satisfied, I had the pleasure to understand from Mr. Puget, that he had met the most cordial reception from our former friend Sen<sup>r</sup> Arguello, the lieutenant of the Presidio, who then, as on our first visit to this place, in the absence of the governor of the province, officiated in that capacity. From this gentleman we were likely to meet very different treatment to that which we had received from Sen<sup>r</sup> Arrillago, whose restrictive arrangements on our last visit to Monterrey, had obliged us to seek that hospitality and protection from the untutored inhabitants of the Sandwich islands, which we despaired of obtaining in any of the ports under his jurisdiction. Sen<sup>r</sup> Arrillago having been ordered to some inferior establishment, had resigned his authority at this place, and had departed about two months previously to our arrival, and a lieutenant in the Spanish

army, Don Diego de Borica, had been appointed some time since, to the government of this province, and was now daily expected at Monterrey.

As soon as the ship was secured, an officer was sent to the Presidio with the usual ceremonious compliments, and with an apology for our not having saluted. On landing I was received by Sen<sup>r</sup> Arguello, to whose kind and benevolent offices we had before been greatly indebted, with marks of the greatest friendship and respect. He expressed the satisfaction he should receive by having it now in his power to supply us with the various necessary refreshments the country afforded: and being without the least restraint, he should endeavour to administer to our amusement and recreation. Whatever means he possessed that were likely in any way to contribute to the happiness or comfort of the present time, or to our future welfare, he was now empowered, by the orders that had been transmitted to this government from the viceroy of New Spain, sedulously to afford, and prompted by the interest he felt in our accommodation, he should with great pleasure carry those orders into effect.

The people who, on our first visit to this Presidio, had deserted from the Dædalus and Chatham, we found here, with directions for their being delivered up to me; but as the governor of the province was so soon expected, I deferred taking any steps in this business until he should arrive; nor did I erect our tents or observatory on shore for the same reason, as I considered it would be more respectful to submit these matters to the approbation of Governor Borica himself than to Sen<sup>r</sup> Arguello, from whom I only solicited permission to recruit our wood and water, and to obtain some necessary refreshments.

On Friday morning the 7th I received from Sen<sup>r</sup> Arguello the only letter that had arrived at this place for me; this letter was from the Conde Revilla Gigedo, the late viceroy of New Spain, in reply to one I had written to his excellency on the 22d of May, 1793. In the most polite and friendly terms the count informed me of Mr. Broughton's safe arrival at Madrid, and expressed the highest approbation of the conduct of Sen<sup>r</sup> Fidalgo, whose services I had represented to him we had been greatly indebted to, on heaving the Chatham down at Nootka. Those very obliging offers he had before made, in wishing to contribute to our health and welfare, by whatever means of assistance this country could bestow, were in this letter repeated. It was dated on the 20th of October, 1793, about the time when we first felt the influence of Sen<sup>r</sup> Arrillago's disinclination towards our little squadron. It was addressed to me at Monterrey, with directions there to remain for my

reception, until it should be understood I had taken my leave of these regions, and in the event of my so doing, without repairing to this place again, the letter was then to be transmitted to me in England. From these circumstances it would appear, that the correspondence I had been thus honoured with, was not intirely of that complimentary nature that Sen<sup>r</sup> Arrillago had thought proper to consider it; and that the viceroy *did expect* that I should make, *at least, a second visit* to Monterrey, was evidently proved by the deserters having been sent hither, instead of being forwarded to Nootka, as he had formerly intended to do, but which determination, Sen<sup>r</sup> Arguello informed me, he had been induced to alter, under the persuasion of this being the most likely place of our meeting with them.

Not having received official intelligence at this port from England, and there being here no dispatches waiting the arrival of Sen<sup>r</sup> Alava, through which channel I might possibly have obtained some sort of information, by which my future proceedings might, in some degree, have been regulated, I could not help feeling very great disappointment, anxiety, and concern. I was not, however, totally destitute of hope, that some letters might have arrived at St. Diego. To ascertain this fact, notwithstanding that it was from hence to St. Diego more than four hundred English miles, Sen<sup>r</sup> Arguello very obligingly ordered an extraordinary courier to be ready the next day, whose return from St. Diego might be expected in ten or twelve days, and before the expiration of that time, I had no idea of quitting this station. Under the circumstances of the mortifying disappointment I now felt, I was unable to form any plan for our future operations, excepting that which I had before meditated, of remaining here a sufficient time to recruit the health and strength of our little community. For, notwithstanding that we were not materially affected with indisposition, yet the health of most of us demanded care and attention. The fatiguing service in which we had now been so long employed, and the very few fresh meals we had been enabled to obtain since the middle of the preceding month of March, must be sufficient to convince the judgment, without the appearance of actual disease, that three weeks or a month would be well dedicated in availing ourselves of the refreshments and recreation, in which we had now so favorable an opportunity to indulge.

Fresh beef, which was extremely good, was daily and unlimitedly served to the crew of each vessel; but vegetables were a scarce commodity, owing to the dryness of the season, which gave the country an appearance of being parched up; and the few articles which had been produced on the small portion of land allotted here to the purpose of garden ground were nearly exhausted. We, however, were not apprehensive of wanting sufficient variety

to cover our tables, as in the immediate neighbourhood of the bay there were an immense number of wild geese, ducks, plovers, curlews, and other wild fowl; to which, by little excursions into the country, our sportsmen added an abundance of very fine quails and some hares, which afforded us excellent repasts in addition to their amusement. It was something singular that none of these species of wild fowl, had been found in any degree so numerous on either of our former visits to Monterrey.

The weather was fair and pleasant, with a moderate breeze from the sea, which in the evening brought in the Princissa. We had considered this vessel to have been to the northward of cape Mendocino, whilst we contended with the north-west storm to the south of it, and an idea had arisen, from the appearance of the evening that preceded the gale, that the Princissa must, in that situation, have experienced much blowing weather from the south-eastward; but on inquiry this was not found to be altogether the case; she was, however, to the north of the promontory in question at that time, and her progress, like ours, had been greatly retarded by contrary winds; but on the 1st of November, in the latitude of 45° 30′, she having generally kept about 30 leagues from the coast; these adverse winds were succeeded by a pleasant gale from the north-west, which continued during the remainder of the passage.

This fact, though not proving cape Mendocino to be so singularly situated as we had supposed it to be, with respect to moderate or boisterous weather, yet serves to shew that it has an influence on the winds that prevail during the winter season, as the south-easterly storms are scarcely ever known to the southward of cape Mendocino; where, whilst the north-west gale reduced us to our storm staysails for twenty-four hours, the Princissa to the north of it, felt nothing of its fury; but, on the contrary, had only a moderate north-west gale, to which the whole of her canvass was spread.

We had the pleasure to meet our friends in the Princissa very well, though much disappointed, like ourselves, in not receiving any official communications from Mexico; but as the courier was in readiness to depart the next morning, Sen<sup>r</sup> Alava embraced this opportunity to make the necessary inquiries at St. Diego.

In the night the wind blew strong from the northward; and on the return of the day it considerably increased from the north-west. Notwithstanding the vessels rode without the least inconvenience or apparent danger, yet, as our cables had been a long time on board, and had endured great trials, the top-gallant masts were got down, the yards and topmasts struck, and the vessels made perfectly snug; by noon, however, the wind moderated, and we

had a return of fair and pleasant weather; all hands were now employed in different services, amongst which, recruiting our stock of fuel and water, was no inconsiderable labour; no difficulty was experienced in procuring the former, but the dryness of the season had rendered the latter very scarce. The wells that we had dug, on our first visit to Monterrey, though not perfectly dry, afforded too small a quantity to answer our demand, and we had no means of obtaining a sufficiency of water nearer than up a valley about half a mile to the eastward of the Presidio, and full that distance from the sea side, where a sluggish stream oosed through the bed of a water-course, composed of a loose sandy soil; and here, by sinking several casks, temporary wells were formed, which afforded only a scanty supply, though the water was extremely good. This mode of procuring it was very tedious, and the distance which the casks, when filled, had to be rolled, through a loose sandy gully, to the boats, was very great, and proved to be a very laborious task, yet the water was infinitely preferable to any that could have been collected from the stagnated brackish pools, in the vicinity of the Presidio.

On Sunday part of the ship's company were indulged with a run on shore, and the day following, Monday the 10th, we were busily employed in facilitating, as much as possible, the procuring of our water, by the best arrangement in our power, notwithstanding which we could not prevent its being a very laborious business.

The weather continued to be remarkably pleasant, and on Tuesday evening, the 11th, Sen<sup>r</sup> Don Diego Borica arrived at the Presidio, where, the next morning, accompanied by Mr. Puget and most of the officers of both vessels, I waited upon him, to congratulate him on his safe arrival, and to acquaint him with my reasons for visiting the countries under his jurisdiction; these attentions, I had the pleasure to find were perfectly satisfactory, and were received in a manner that was highly compatible with the respective stations that each of us had the honour to fill.

The indulgence I had solicited, and which had been granted by Sen<sup>r</sup> Arguello, was now very politely extended by the governor, with further permission to erect our tents and observatory on shore, under the direction of our officers, and protection of our own guard, to which he very obligingly added the assurance of doing every thing in his power that could in any way contribute to make our stay as pleasant and agreeable as their limited society and the loneliness of the country would afford.

After this introductory discourse, we understood from Sen<sup>r</sup> Borica, that accompanied by his wife and daughter, a young lady about eleven years of age, and a suitable number of attendants, he had come from Mexico to this place on horseback; as no other mode of conveyance was to be procured. They were provided with a small camp equipage, which was occasionally pitched, either as a retreat from the heat of the sun, or for rest during the night. Upwards of eight months had been employed in performing this journey, through a country very thinly inhabited, and which afforded but little comfortable accommodation for travellers.

In the evening an express arrived from Mexico, which brought dispatches from the viceroy of New Spain to the governor, together with the long expected instructions to Sen<sup>r</sup> Alava, respecting the cession of Nootka to the crown of Great Britain, but nothing addressed to me accompanied these credentials; and, from a conversation with Sen<sup>r</sup> Borica, I was not flattered with the least probability of receiving any intelligence from St. Diego, because it was not likely, had any dispatches for me arrived there, that he should have remained ignorant of the circumstance; and as the destination of Sen<sup>r</sup> Alava was well known to the officers commanding the southern posts of this province, letters for either of us would most likely, immediately on their arrival, have been transmitted hither.

The embarrassment I had been long under was now very materially increased, and I was greatly at a loss as to what measures were best to be pursued. From this dilemma, however, I was very unexpectedly relieved the next day, Wednesday the 12th, by Sen<sup>r</sup> Alava very obligingly confiding to me that part of his instructions which stated, that no further altercation would take place with respect to the precise meaning of the first article of the convention of the 20th of October, 1790, as the documents transmitted by the late Sen<sup>r</sup> Quadra and myself, had enabled our respective courts to adjust that matter in an amicable way, and nearly on the terms which I had so repeatedly offered to Sen<sup>r</sup> Quadra in September 1792. In addition to which the Spanish minister's letter set forth, that this business was not to be carried into execution by me, as a fresh commission had been issued for this purpose by the Court of London.[1] The same was announced to governor Borica by the new viceroy of Mexico, the Marquis de Branciforte, with instructions to receive the person acting under this commission into their Presidios.

Having maturely considered the several parts of this intelligence, I concluded that from the length of our voyage, and the various accidents to

which the service in which we were employed would necessarily render us liable, Government did not expect we should remain longer in these seas, than the survey of the American coast might require; and in truth we were not now in a fit condition to protract our stay in these regions.

The very exhausted state of our stores and provisions not only demanded such supplies as were not easily within our reach, but as the Discovery had been frequently aground, it was highly probable that her bottom might stand in need of some very material repair, of which we had remained intirely ignorant, not having been so fortunate as to meet with a proper situation for the purpose of her undergoing this necessary examination.

One of the great objects of our voyage, the survey of the coast of North-West America, being now accomplished, and relying on the authenticity of the intelligence I had derived from Sen<sup>r</sup> Alava, I did not long hesitate, but determined on making the best of my way towards England, by the way of cape Horn, agreeably to my instructions; and as I had no intention of visiting any part of the American coast to the northward of the 44th degree of south latitude, I purposed that our course from hence should be directed towards that latitude without stopping, unless we should be so fortunate as to fall in with the Gallipagos islands, whose undefined situation I much wished correctly to ascertain; and of course it would necessarily be some time before we reached our next resting place. On this account it became highly expedient that we should sail from hence with as great a quantity of water as we might be enabled to procure, for the reception of which the coopers were directed to repair, and put into order every cask on board capable of holding water; in many cases this was attended with great trouble, from the length of time they had been in use, and the hard service that many of them had endured.

Although the very great distance, and the badness of the road we had to pass in getting the water down to the sea side, made the obtaining of this indispensable article a very tedious and fatiguing business, yet as we were in the mean time benefitting from the air, the exercise of the shore, and the excellent refreshments of the country, I could not consider our detention here as a loss of time, because I was assured that it would be attended with the inestimable advantage of securing to us all, that state of health which the remainder of our voyage we had yet to perform homewards, would necessarily require.

Some doubts having arisen in my mind, as to the safe arrival in England of the copies (which I had forwarded thither) of our survey of the American coast to the northward, from Fitzhugh's sound to cape Decision, and

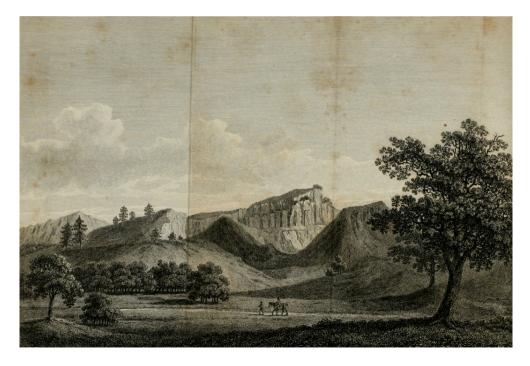
southward from this port to the 30th degree of north latitude, I deemed it expedient that a duplicate of the former papers, together with a copy of our survey during the preceding summer, as also that of the Sandwich islands, should from hence be transmitted to the Admiralty; that in the event of any mischance having befallen the others, or any unfortunate accident happening hereafter to us, our labours might not be intirely lost to our country. The like information, in conformity to my original promise to my much lamented friend the late Sen<sup>r</sup> Quadra, had been solicited by Sen<sup>r</sup> Alava, for the use and information of the Spanish court, and with which of course I complied. The preparation of these documents would necessarily occupy some time, but I had little doubt of their being finished by the time we should in other respects be ready to depart.

The deserters from the Chatham and Dædalus had, at my request, been delivered up to me, at least such of them as were the subjects of Great Britain. An account of expences, amounting to three hundred and twenty-five dollars and an half, was exhibited against them; but as I did not consider myself authorized to discharge this debt, (though of its having been incurred by the deserters, I could entertain no doubt) of which I acquainted Governor Borica, by letter, on Sunday morning the 16th, and at the same time added, that I should represent the business fully to the Board of Admiralty, and that I had no doubt that the strictest justice would be done. With this the governor seemed to be completely satisfied, and in his letter to this effect, after expressing the greatest approbation, he, in virtue of the harmony and good understanding that continued to exist between us, solicited my good offices in behalf of the deserters before mentioned.

The weather, since the 8th, had been delightfully pleasant; in the day time the wind blew a gentle gale from the sea, and during the night a calm, or gentle breeze, prevailed from the land, so that the precaution we had taken of striking our yards and topmasts, since the moment of our having done so, ceased to be necessary. This agreeable weather caused the water in the bay to be so very tranquil, that landing was easily effected on any of its shores, and rendered our intercourse with the country extremely pleasant.

The same cause operated to invite the excursions of several parties into the country on foot and on horseback. These were rendered further agreeable and pleasant, by the friendly and attentive behaviour of our Spanish friends, of which I was seldom able to avail myself, not only from the various matters of business in which I was deeply engaged, but from the very debilitated state of my health, under which I had severely laboured during the eight preceding months; I was, however, on Wednesday the 19th able to

join in a party to the valley through which the Monterrey river flows, and was there gratified with the sight of the most extraordinary mountain I had ever beheld. On one side it presented the appearance of a sumptuous edifice fallen into decay; the columns which looked as if they had been raised with much labour and industry, were of great magnitude, seemed to be of an elegant form, and to be composed of the same cream-coloured stone, of which I have before made mention. Between these magnificent columns were deep excavations, resembling different passages into the interior parts of the supposed building, whose roof being the summit of the mountain appeared to be wholly supported by these columns rising perpendicularly with the most minute mathematical exactness. The whole had a most beautiful appearance of human ingenuity and labour; but since it is not possible, from the rude and very humble race of beings that are found to be the native inhabitants of this country, to suppose they could have been capable of raising such a structure, its being the production of nature, cannot be questioned, and it may not be preposterous to infer, that it has been from similar phænomena that man has received that architectural knowledge, by which he has been enabled to raise those massy fabricks, which have stood for ages in all civilized countries.



W. Alexander del. from a Sketch taken on the Spot by J. Sykes

## A Remarkable Mountain near the River of Monterrey.

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In this excursion I had an opportunity of seeing what before I had been frequently given to understand; that the soil improved in richness and fertility, as we advanced from the ocean into the interior country.

The situation we had now reached was an extensive valley between two ranges of lofty mountains, whose more elevated parts wore a steril and dreary aspect, whilst the sides and the intervening bosom seemed to be composed of a luxuriant soil. On the former some pine trees were produced of different sorts, though of no great size, and the latter generally speaking was a natural pasture, but the long continuance of the dry weather had robbed it of its verdure, and had rendered it not very interesting to the eye; yet the healthy growth of the oak, both of the English and holly-leaved kind, the maple, poplar, willow, and stone pine, distributed over its surface as well in clumps as in single trees, with a number of different shrubs, plainly shewed the superior excellence of the soil and substratum in these situations, to that which was found bordering on the sea shore.

The same uninterrupted serenity of the weather continued, and on Friday evening the courier from St. Diego returned, but he brought no kind of intelligence whatever; and the 24th being the day fixed for the return of the express to Mexico, I embraced that opportunity for transmitting to the Admiralty a brief account of our transactions during the preceding summer, and a copy of our surveys made in that and the former year, which had been prepared for that purpose. These documents, agreeably to the advice of the governor and our other Spanish friends, I took the liberty of addressing to the marquis of Branciforte, viceroy of New Spain, and requested that he would do me the favor of forwarding them to England by the most early and safe conveyance.

All expectation of Mr. Broughton's return and of his resuming the command of the Chatham being now at an end, I appointed Lieutenant Puget to that office, Mr. Baker, and Mr. Swaine I removed to be the first and second lieutenants of the Discovery; Mr. Thomas Manby I appointed to the vacant lieutenancy, and Mr. H. Humphreys, to be the master of the Chatham in his room.

Our business with the shore now began to draw nigh to a conclusion; the yards, topmasts, and top-gallant masts were got up, and the rigging put into condition for sea service, but a sufficient stock of water was however not yet obtained; whilst this was completing, I dispatched Lieutenant Swaine on Thursday morning the 27th with three boats over to the mission of S<sup>ta</sup> Cruz, in order to procure a supply of garden stuff, as the continuation of the dry weather, here, had made every species of esculent vegetables extremely scarce. Mr. Swaine returned on Saturday evening the 29th, having been tolerably successful, so that with our live stock and the other refreshments that Monterrey had afforded, we were likely to take our leave of it, with as good a store for the preservation of health, and to be as well provided for the long and distant passage we had to perform, as from any port in the known world. The two following days were employed in receiving on board the tents, observatory, instruments, and all other matters from the shore, and in getting the ship in readiness to proceed.

The variety of objects that had occupied my time whilst at Monterrey, had, as at Nootka, precluded my attending to little more of our astronomical business, than that of ascertaining the rate and error of the chronometers, according to the meridian of these places as fixed by our former observations: yet I had considered these to be of sufficient authority to answer all the purposes of correcting our survey of the coast in the respective vicinity of those stations. By comparative observations made by Mr. Whidbey with Mr. Ramsden's circular instrument, and those made with the artificial horizon by myself, I was in hopes of adducing further reasons in support of the means I had adopted for fixing of the longitude, and for correcting our general survey of this coast during the preceding summer, between Trinity islands and cape Decision; and I had the satisfaction to find the same corresponding accuracy at Monterrey as had appeared at Nootka.

On the 13th of November in the bay of Monterrey the chronometers shewed the following longitudes:

Arnold's No. 14,	238	0	0	,	50	"		
Ditto, 176,	238		33		5			
Kendall's	237		59		15			
The true longitude being 238° 25′ 45″, Arnold's No. 14 appeared to be 24′ 55″, Kendall's, 26′ 30″ to the westward, and Arnold's No. 176, 7′ 20″ to the eastward of the true longitude. And by altitudes taken on shore with the artificial horizon on the 28th of November, Arnold's No. 14 was found to be fast of mean time at Greenwich, at noon on that day,	5	h	19	,	23	"	0	m
And to be gaining on mean time per day at the rate of					24		1	
Arnold's No. 176 was fast of mean time at Greenwich,	11		28		21		30	
And gaining on mean time per day at the rate of					50		25	
Kendall's fast of mean time at Greenwich,	9		58		23			
And gaining on mean time per day at the rate of					30		53	
By equal altitudes taken on shore with the circular instrument between the 13th and 29th of November, the following are the rates at which the chronometers were found to be gaining per day; (viz.)								
Arnold's No. 14,					23		55	
Ditto 176,					50		19	
Kendall's,					30		52	

The very inconsiderable difference between the rates thus found, and those ascertained by the artificial horizon, must be received as a proof of the correctness of that method, which should be resorted to, whenever better authority cannot be had.

The above true longitude, latitude, variation, and inclination of the marine dipping needle, were found to correspond with our observations made on our former visit to this place in December, 1792.

This however was not the fact, as the fresh instructions were addressed in the first instance to me.

## CHAPTER III.

Leave Monterrey—Some Account of the three Marias Islands—Proceed to the Southward—Astronomical and nautical Observations.

The method that had been pursued to preserve as great a regularity as was possible in the rate of the chronometers, December 1794 had so far succeeded with No. 14, that its rate as ascertained at Nootka and at Monterrey, differed only 54"; this made me very anxious to fall in with some place whose longitude had been settled by professed astronomers, by which means the accuracy of our calculations would be confirmed, or the error they might have been liable to, would by such comparison become apparent; leaving it at the discretion of geographers, or of those who might hereafter follow us, to adopt or reject such correction as their own judgment might direct. For this purpose, no station appeared to me to be so eligible as cape St. Lucas, at the south extremity of the peninsula of California, (on a moderate computation not more than eight or ten days sail from Monterrey,) as at St. Joseph's, in the immediate neighbourhood of that promontory, the transit of Venus had been observed, and other astronomical observations had been made by professors in that science, whence its positive situation had been correctly determined. But as our observations during the preceding autumn for fixing the longitude of the coast of New Albion, southward from hence to the 30th degree of north latitude, had been all reduced to port St. Diego as a central station, and the rate of the chronometers for correcting that survey had been there ascertained; I deemed it expedient to steer first for the island of Guadaloupe, for the purpose of examining whether the situation we had before assigned to that island from the result of those observations, would agree with the longitude in which we had now placed Monterrey.

With a fresh breeze from the N. E. attended with fair and pleasant weather, on Tuesday the 2d of December we quitted Monterrey, and bad adieu to governor Alava, and the rest of our Spanish friends, from whose great kindness and hospitality we had not only derived much relaxation and happiness, but by their attention to our future wants, we had every prospect of a continuation of that health, which now seemed to be established, by the refreshments we had there procured.

From Monterrey bay our course was directed to the S. E. but in the evening the gale died away, and after about twelve hours calm, it was succeeded by light variable adverse winds, which continued until near noon on Thursday the 4th, when it fixed in the western quarter, blowing a pleasant gentle breeze. The observed latitude was 35° 29′, longitude 238° 16′. The coast of New Albion was still in sight, bearing by compass from N. E. to N. W. by N. This was the last we saw of it; the wind between W. N. W. and N. N. W. gradually increased to a pleasant gale, which by the evening of Monday the 8th brought us in sight of the island of Guadaloupe; this we passed in the night, and from the observations made on the preceding and following day, which exactly agreed with the ships run by the log, I had the satisfaction of finding its situation exactly to correspond with that which we had before assigned to it; hence it is fair to presume, that the whole of this coast which has fallen under our examination, has been laid down relatively correctly, however our longitude may be found to vary from other navigators or observers.

Having ascertained this fact, and being unwilling to lose any opportunity by which the advancement of geography might in the slightest degree be furthered, I steered over to the coast of California, for the purpose of fixing in our way towards cape St. Lucas, the position of some of the most projecting points between that promontory, and the part where we had quitted its shores the foregoing autumn; but in so doing I had no intention of approaching sufficiently near to attempt a minute delineation of the coast.

At day-light in the morning of Tuesday the 9th we had sight of the island of Cerros, bearing by compass from E. N. E. to N. E. about ten leagues distant. This is represented in the Spanish charts to be about ten leagues long, and to be lying before an extensive bay, on the shores of the peninsula. The south-western point of this bay is a very projecting promontory named Morro Hermoso: west from thence is laid down a smaller island called Natividad. To these as the day advanced we drew somewhat nearer, but the land was still too far off to admit of our forming any correct judgment as to the productions of the country, or the shape of its shores. Those of the island of Cerros wore an uneven broken appearance, though on a nearer view they seemed to be all connected. The southern part, which is the highest, is occupied by the base of a very remarkable and lofty peaked mountain, that descends in a very peculiar rugged manner, and by projecting into the sea, forms the south-west end of the island into a low craggy rocky point; this as we passed at the distance of five or six leagues, seemed, like the other part of the island, to be destitute of trees, and nearly so of all other vegetable productions. Natividad appeared to be more moderately elevated, and at noon bore by compass N. 70 E.; the south-east point of the island of Cerros, N. 46 E.; the peaked mountain, N. 37 E.; its south-west point, N. 27 E.; its north-westernmost part in sight, N. 20 E.; and isle de St. Benito, which is a small island, seemingly with some rocks and islets about it, N. 11 W. distant eight or nine leagues. In this situation the observed latitude was 27° 51′, longitude by Arnold's No. 14, 244° 38½′, by Kendall's 244° 38¾′ and by Arnold's No. 176, 244° 54′. The variation, by the surveying compass, was at this time 8° eastwardly.

The weather continued to be fair and pleasant, and, with a gentle breeze from the north-west, we proceeded along the shore. In the afternoon we had sight of what we supposed was Morro Hermoso, which at that distance appeared to be insular, and, like Natividad, seemed to be moderately elevated. Although we were too far distant to attempt an accurate delineation of these shores, yet we were enabled pretty clearly to ascertain the position of their most prominent points, and, from the result of our calculations, the island of Cerros appeared to form on its western side a deep bay, between its north-west and south-west points, which are about five leagues apart, in a direction N. 20 E. and S. 20 W.; the peaked mountain being the part whose situation we were best able to fix, is in latitude 28° 8′, longitude 244° 58′. From this mountain the island St. Benito lies N. 65 W. at the distance of twenty miles, and the island of Natividad S. 4 E. distant fourteen miles. The latter appeared to be about four miles long, in a S. E. and N. W. direction, and, like the island of Cerros, presented a barren and dreary aspect. Behind it was the point which we had taken for Morro Hermoso, in latitude 27° 52′, longitude 245° 7′. The channels round these islands, and between them and the main land, are, in the Spanish charts, represented as clear and navigable; we were not, however, sufficiently nigh to them to satisfy ourselves in this particular. During the night our course was directed more southerly, which, although it kept us within sight of the land, yet by the morning of Wednesday the 10th, it had increased our distance further from the coast than I had reason to expect, from the way in which it has been laid down. We were now at the distance of 12 to 14 leagues, and whether the parts in sight were or were not immediately on the sea shore, it was not possible for us to determine, but the shore was sufficiently marked to admit of our making the necessary observations, as we sailed along it, for the object I had in view. The northernmost point in sight at noon, being the same land that had formed the northern extremity ever since the morning, bore by compass N. 3 W. distant seventeen leagues, a particular high part, appearing to form the north point of a bay or opening on the coast, N. 17 E. at the same distance; and what appeared to form a very conspicuous point, from whence

the coast seemed to take a very eastwardly turn, N. 25 E. distant thirteen leagues. In this situation the observed latitude was 26° 48′, longitude 245° 26½′; and, if the above estimations be correct, the latter point will be found to lie in latitude 27° 20′, longitude 245° 49′. Several turtles were seen at this time on the surface of the sea, one of which was taken by our small boat. Towards sun-set the weather became cloudy, the wind veered to the southward, and threatened us with a heavy rain, but by midnight the wind resumed its north-west direction, and the weather became fair and pleasant. Not being in sight of the coast, on Thursday morning the 11th, I steered more to the eastward, and by day-light on Friday the 12th we were within sight of a high round mountain, which we supposed was on the main land of the peninsula, bearing by compass N. E. ½ E.

The part of the ocean in which we had now arrived abounded with bonitos, albicores, and other fishes of the tropical regions, with a great many turtles. These seemed so perfectly indifferent to any interruption that we occasioned them, either by passing near to, or even over them, that I was induced to send the small boat to take some of them up, and in about half an hour she returned loaded with thirteen very fine green ones, each weighing from seventy to two hundred pounds. They all proved to be extremely good eating. Some of them were stuck with the turtle peg, but most of them were taken into the boat unhurt. The observed latitude at noon was 25° 11′. longitude 247° 481/4′, and the variation of the compass 9° eastwardly. The above high round mountain at this time bore N. 30 E. distant 25 leagues, and land supposed by us to be an island, S. 35 E.; to the eastward of which our course was directed until two in the afternoon, when our conjectures were discovered to have been ill founded; for, instead of this land proving to be an island, it formed the west point of a spacious open bay, the contiguous shores to which were very low, and bounded by breakers, whilst the more interior country rose in small detached hillocks, giving the whole from the deck the appearance of a group of islands, but from the mast-head it was seen to be all connected, for which reason we hauled our wind, and passed to the westward of this land, which, in every point of view, even at a very little distance, seemed to be insular, owing to the lowness of the land to the eastward of the elevated part that forms the point, and which, in a south-east and north-west direction, appeared to occupy an extent of about five miles. It is highest in the centre, from whence its north-western extremity shoots out and descends gradually to a low point of land, with an even surface, but in every other part the acclivity was steep and irregular; and the surface, broken into deep chasms, terminates at the water side in abrupt rocky cliffs. On its northern side lies an islet with some rocks at a little distance from the

shore, on which there was an appearance of some verdure and fertility, but where its surface was rocky and broken it had a steril and barren aspect. In the evening we passed within about five miles of this point, which I supposed was the south point of the bay de la Magdalina, and which, according to our observations, is situated in latitude 24° 53′, longitude 247° 56′, from whence, in a south-east direction, at the distance of about three or four leagues, is another elevated part of the coast, which, like the former at a little distance, has the appearance of being insular. As the coast, for some extent to the south-eastward of this station, is in the Spanish charts represented as low, and dangerous to approach, we stretched to the south-eastward during the night, and on Saturday morning the 13th, there being no land in sight, we stood to the eastward, and soon regained a distant view of the coast, which was high and mountainous.

Being favored with a fine gale from the north-west, and delightfully pleasant weather, we made great progress towards the land, for which we continued to steer until nine in the evening; when, being in 80 fathoms water, and conceiving the land to be not far off, we hauled to the wind and plied under an easy sail, with soundings from 80 to 90 fathoms, until five on Sunday morning the 14th, when we again stood towards the land, and to our great surprize, at day-light, found it to be eight leagues distant, and bearing by compass from N. 54 E. to S. 68 E. By ten in the forenoon we were within about three leagues of the shore, at which time we bore away, and steered for cape St. Lucas. The parts of the coast to which we were now opposite were in a great measure composed of steep white rocky cliffs, from whence the country rose with a very broken and uneven surface to a ridge of stupendous mountains, which were visible at a great distance into the ocean. The shores jut out into small projecting points that terminate in abrupt cliffs, and having less elevated land behind them, gave them at first the appearance of being detached islands along the coast, but, on a nearer approach, this did not seem to be the case. The general face of the country was not very inviting, being destitute of trees and other vegetable productions.

The observed latitude at noon was 25° 12′, longitude 250°, and the variation of the compass 7° eastwardly. At this time the northernmost part of the exterior coast of California in sight bore by compass N. 15 E. the nearest shore N. 63 E. distant three leagues, and a point to the northward of, and intercepting our view of cape St. Lucas S. 39 E. distant six leagues, beyond which the cape soon appeared, and was found to lie from that point S. 47 E. distant two leagues. In the afternoon we passed this point, or promontory, which gradually, though not very regularly, descends from the range of mountains before mentioned, and terminates at its south extremity in a

hummock of low, or very moderately elevated land, that had the same rocky steril appearance as that we had been opposite to in the morning.

The weather had been very favorable to the object I had had in view in thus directing our course to the southward. According to our observations cape St. Lucas is situated in latitude 22° 52' longitude 250° 16' 18". The very sharp turn which the coast takes from that point towards the gulph of California, enabled us in a very precise manner to ascertain the most projecting part of the cape, which according to the Spanish charts, and the information I had procured from the Spaniards themselves, is situated under the same meridian as their establishment of St. Joseph, and which agreeably to the Spanish printed chart compiled by Miguel Costanso in 1770, is stated to be in latitude 23° 3′ 42″, longitude 250° 17′ 30″. On the confirmation of our calculations by this authority I derived much gratification, as I had now great reason to presume, that the position of the western coast of America between cape St. Lucas in California, and cape Douglas in Cook's inlet, as heretofore stated by me, would be found tolerably correct. The very trivial variation that had occurred in the rate of Arnold's No. 14 for the preceding two or three months, induced me to place my principal reliance upon it, and by which the longitude of cape St. Lucas differed from the above, only 1' 12". By Arnold's No. 82 on board the Chatham, the longitude of the cape was 250° 9′; Arnold's No. 176, gave 250° 37′; and Kendall's, 250° 21′ 30″. From these several results it should seem, that Arnold's No. 176 varied most from the truth; and as I have had occasion before to observe, this deviation may possibly have arisen by the motion it received on its being taken on shore, for the purpose of discovering its rate of going.

As the situation of the Marias islands lying between cape St. Lucas and cape Corientes before the port of St. Blas, had been variously defined by different persons, and as these islands were nearly in our route, an opportunity was likely to be afforded me for determining their position; and on considering the length of the passage we had yet to perform, I was induced to hope we might at those islands be able to recruit our stock of water; for these reasons our course was directed towards the Marias, with a fresh gale from the northward, and delightful weather. The sea still abounded with fish, and several turtle were seen; but as our former supply was not yet exhausted, and as the gale was too favorably tempting to admit of a moment's delay, they remained unmolested.

According to Dampier, the islands for which we were then steering are situated E. S. E. at the distance of 40 leagues from cape St. Lucas; according to the Spanish chart 47 leagues; and by the Spanish M. S. chart they are

stated to be 60 leagues from that promontory. This irreconcilable difference rendered it no easy task to determine on which to rely; the difference in the Spanish charts rendered the accuracy of each equally questionable, and our own experience had proved both of them to be very erroneous in several instances. Under this uncertainty, about nine o'clock on Monday the 15th, at night, being then 42 leagues from cape St. Lucas, and in the direction in which the Marias were said to lie, we plied under an easy sail until the next morning, Tuesday the 16th, when we made all sail, steering to the E. S. E. which course, by nine in the forenoon, brought us in sight of those islands, bearing by compass E. ½ N.; in this direction we instantly steered, but as we were not sufficiently up with the land to gain anchorage before dark, the night was passed in preserving our situation with the land, and in the morning of Wednesday the 17th, we steered for the passage between the northernmost and the middle, or Prince George's island, so distinguished by Dampier. The most northern and largest island of this group, is about thirteen miles long, in a S. E. by E. and N. W. by W. direction, which is also nearly the line in which these islands seemed to lie from each other. As we passed along the northernmost island it appeared to be but moderately elevated, notwithstanding that we had descried it at the distance of near 18 leagues; its highest part is towards the south, from whence it gradually descends and terminates in a long low point at its north-west extremity, which according to our observations is situated S. 68 E. and at the distance of 64 leagues from cape St. Lucas. A low detached islet, and a remarkably steep white cliffy rock, lie off this point of the island, whose shores are also composed, but particularly so on its south-west side, of steep white rocky cliffs; the same sort of substance seemed to be its principal component part, and although in some places it was tolerably well covered with low shrubs, yet upon the whole it presented but a dreary and unproductive scene. Its south-eastern extremity, which likewise descends gradually from the summit of the island, terminates also in a low projecting point with some rocks lying off from it. On either side is a small bay; that on the eastern side is bounded by a beach, alternately composed of rocks and sand, and as we gained soundings of 35 fathoms at some distance as we passed by it, little doubt was entertained of its affording good anchorage, provided the bottom should be good; as it is protected against the general prevailing winds. The surf however broke with some violence on its shores, and as it did not seem from the scanty portion of its vegetable productions, and the apparent dryness of the soil, to possess what we principally, and indeed only wanted, water; we proceeded towards that station which Woods Rogers describes to have occupied, and where about the same season of the year, he procured a great supply of excellent water. This was on the north-east side of Prince George's island. In our way thither we passed between Prince George's and the northwesternmost island, in a passage about six miles wide, with soundings from 20 to 40 fathoms, sandy bottom, and so far as we became acquainted with its navigation, it is free from danger or interruption. The south-west side of Prince George's island is bounded by detached rocks lying at a small distance from its shores; these in general, but more so on its northern and eastern side, descend gradually from the centre of the island (whose summit is nearly as high as that of the northernmost island,) and terminate at the water side in a fine sandy beach. This was infinitely more verdant than the other island, as its vegetable productions extended from the more elevated parts to the wash of the sea, and grew with some luxuriance though we did not perceive any trees of great size on the island, nor did it seem to afford any streams or runs of fresh water. Some gullies were seen as we passed along, which in addition to the cheerful appearance of the country, flattered us with the hope, that on further examination they would be found to afford us the supply of water we needed. Having shortly after noon, reached the spot pointed out by former visitors as most likely to furnish this essential article, we anchored on a clear sandy bottom, in 10 fathoms water, about three quarters of a mile from the shore, on the north-eastern side of Prince George's island; its east point bearing by compass S. 16 E. about two miles and a half distant; its north-east point, N. 68 W. distant two miles; the north point of the northernmost island, N. 46 W. about six leagues distant; and the most southern island, which is the smallest, from S. 21 E. to S. 45 E. about four leagues distant.

Two boats were immediately dispatched with Mr. Whidbey and Mr. Manby in different directions in quest of water, which however, if found, could not be got on board without some difficulty, on account of the surf which broke on every part of the shore, but not so violently as to prevent the parties from landing. In the evening both returned; Mr. Whidbey had extended his excursion to the north-westward from our anchorage, without finding any water, and Mr. Manby had been equally unsuccessful to the south-eastward round the south point of the island. On its south-east side the beds of many spacious water courses were seen, which in the rainy season appeared to give vent to copious streams, as some of them were twenty feet in width. In some a moistness was observed, and Mr. Manby was of opinion, that by digging wells, water might have been procured. A supply by this means was however precarious, and as we could not devote any time to uncertainties, I determined to depart without further delay, and at eight o'clock we were again under sail.

Our visit to these islands not having afforded us an opportunity of making a very accurate delineation of their shores, or of acquiring such information as might render them objects worthy the particular attention of future visitors to these seas, I have not subjoined any sketch of them, and shall content myself by noticing, that the anchorage we quitted, is situated according to our observations made on the preceding day, and the day after we sailed (not having obtained any observations on the day of our arrival and departure) in latitude 21° 28′, longitude 253° 54′; and that in a direction N. 50 W. and S. 50 E.; these islands occupy a space of about 14 leagues; the length of the northernmost has been already stated, its breadth is about nine miles; the next in size and direction is Prince George's island, this is about eight leagues in circuit; and the third, or south-easternmost, is about nine miles round. In navigating near them we observed no danger; some detached islets and rocks are about the shores, but all are sufficiently conspicuous to be avoided; and the regularity of the soundings, so far as our examination extended, gave us reason to believe, that secure anchorage might be obtained against the prevailing winds, at a commodious distance from the shore.

From the gentlemen who had landed (being myself from the ill state of my health unable to go on shore) I became acquainted, that the soil of Prince George's island seemed to be principally of a sandy nature, on which the chief valuable production was lignum vitæ, besides which, was an almost impenetrable thicket of small trees and bushes of a thorny nature, together with the prickly pear, and some plants of the orange and lemon tribe; the whole growing as close to the water side as the wash of the surf would permit. Some of the lignum vitæ which was cut close to the beach and brought on board, worked up full eight inches in diameter at heart; this wood was very ponderous, of a close black grain, and extremely hard. Before this time I did not recollect to have met with this species of wood growing on any of the islands in these seas, and it is not improbable, that in the more interior parts of this island the trees may be of a much larger size. About the outskirts of the woods, for excepting where in the rainy season the descending waters had formed a path, the thicket was impenetrable; many birds were seen, those of the larger kind were hawks of several sorts, green parrots with yellow heads, parroquets, pigeons, doves, and a variety of small birds, many of which were of beautiful plumage. Pelicans, gulls, curlews, terns, and sandpipers were observed, but no quadrupeds were seen, although in the sand on the bottom of some of the water-courses Mr. Manby noticed the footing of an animal, which he considered to be about the size of a fox; many turtle tracks were on the beach, and nearly a hundred of dead manatee, or sea-cows, were lodged at some distance beyond the present range of the

surf. The carcasses of these animals, from their then state of putrefaction, were considered by Mr. Manby to have been so left about ten or twelve days before, and as they all seemed to be nearly in the same state of decay, the only conjecture that could be reasonably formed, was, that they had been so deposited in a violent southerly storm. They were eagerly devoured by the vultures, hawks, and other birds of prey that had assembled about them in great numbers, and it appeared to be not improbable that the carnivorous animals of the Marias are frequently regaled with such sumptuous repasts, for, besides the sea-cows that remained intire, the skeletons of many hundreds of the same or similar animals had been in like manner cast on shore, at more remote and different periods. A variety of fish common to the tropical regions were seen in great numbers about the shores; amongst these the sharks were very bold and daring, they followed the boats, and made repeated attempts to catch the oars, in which one of them at length succeeded, but with the loss of five of its teeth, which were left in the blade of the oar. A few snakes and guanas were also seen, and some of the latter were very good eating. No traces of human visitors were perceived, though on shore some drift wood was found, with evident marks of its having been worked or hewn with European tools.

This appeared to me to be the substance of the information we acquired by calling at these islands, which are not more than 160 leagues from Acapulco, and in the immediate vicinity of St. Blas. In the Spanish M. S. chart they are placed west from that port, at the distance of about 20 leagues, which appeared to correspond exactly with our observations, in respect to the bearings from cape St. Lucas, and to differ only three leagues in the distance from that promontory; this was further proved (so far as estimated distances could be relied upon) by the distant view we had had of the continent in that direction at our last place of anchorage; notwithstanding which, these islands do not seem to have engaged or attracted the attention of the Spanish government.

As on leaving the Marias it was my intention to make cape Corientes, in order to ascertain its latitude and longitude, our course was directed between the islands and the main land; steering well to the eastward at first, in order that we might avoid a shoal said to extend some distance from the shores of the southernmost of the Marias; at midnight we pursued a more southerly course, but the wind, though attended with fine pleasant weather, was so moderate, that at day-light on Thursday the 18th, the islands we had left were still in sight, bearing by compass the southernmost from N. 82 W. to N. 72 W.; Prince George's island, from N. 70 W. to N. 64 W.; the east point of the northernmost, N. 58 W.; and a distant view of the continental shore from

N. E. by N. to E. by S. This was too remote to form any judgment respecting the country, further than its appearing to have a very lofty and uneven surface, swelling into various eminences of different forms and magnitude.

The observed latitude at noon was 21°, longitude 254° 27′, and the variation of the compass 7° 30' eastwardly. In this situation the high land over cape Corientes bore by compass S. 25 E., land appearing like a small island, lying at some distance from the continent S. 66 E.; the northernmost part of the main land in sight N. N. E., and the southernmost of the Marias stands N. 58 W., distant nine leagues. Much to our surprize, in the afternoon we approached a small black rugged rock, or, more properly speaking, a closely connected cluster of small rocks, which though deserving of attention, from their situation, and the safety of the navigation between cape Corientes, St. Blas, and the Marias, yet they are not inserted in either of the Spanish charts, nor do they appear to have been noticed by any former visitor with whose observations I have become acquainted. The space they occupy does not appear to exceed the dimensions of a large ship's hull, nor are they much higher. They are at a great distance from any land, and, so far as we could perceive on passing by them at the distance of about half a league, the water near them appeared to be deep in every direction. We could not gain soundings close round them with the handline, nor did this small rocky group seem to be supported by any bed of rock or shallow bank. The shores of the main land, to the eastward of them, at the distance of about eight leagues, appeared to be broken, and about ten miles within them are two small islands. These rocks, according to our observations, are situated in latitude 20° 45′, longitude 254° 27′, lying from the land mentioned at noon as appearing like an inlet S. 76 W. six leagues distant, and from the southernmost of the Marias S. 36 E. at the distance of 12 or 13 leagues.

In the evening the breeze that had been very moderate all day, freshened, and towards midnight we passed cape Corientes, at the distance of about five leagues; this time was rather unfavourable for the fixing of its position; but as it was still in sight at day-light the next morning, Friday the 19th, bearing by compass N. 8 E. and having been constantly within our view during the night, I should suppose that it's situation as resulting from our observations will be liable to no very material error. These placed cape Corientes in latitude 20° 22′, longitude 254° 40′; from whence if this statement be correct, the above rocky group will be found to lie N. 26 W. at the distance of nine leagues.

The American coast to the southward of cape Corientes not continuing to take a direction favorable to our route, we were no longer desirous of keeping near its shores, and I therefore made the best of our way towards the island of Cocos and the Gallipagos, with an intention of stopping at one or both of those places. At noon the observed latitude was 19° 15', longitude 254° 48'; the coast at this time was still in sight, bearing by compass north, from N. 85 E. and its nearest part N. E. about ten leagues from us. We were now accompanied by many of the tropical fishes, and oceanic birds, and notwithstanding that we had a fresh breeze from the north-westward, the weather was very sultry and unpleasant. The thermometer within these two days had risen from 70 to 81, and the heat that we now experienced was attended with a degree of oppressive inconvenience, that exceeded any thing of the sort I had ever before felt, under similar circumstances of such an alteration in the height of the mercury. The unpleasantness of the atmosphere on Saturday morning became greatly increased by the northwesterly wind dying away, and by its being succeeded by calms of light variable airs. The atmosphere was perfectly clear, serene, and unencumbered either with fogs or clouds, which made it very difficult to account for the extraordinary change in the climate between our then station and the three Marias islands, as the distance did not exceed 70 leagues. This may possibly be accounted for by the projecting promontory of cape Corientes, and other parts of this mountainous country intercepting those cool refreshing gales from the north that are so grateful and acceptable to the human constitution.

That part of the globe we had now to pass over having been little frequented by persons possessing the means of making due observations on the vertical inclination of the magnetic needle, I purposed to procure some observations at different intervals when the ship was sufficiently steady for this purpose. This day in latitude 18° 20′, longitude 255° 40′,

the marked end,	north face	east, shewed	38	17
Ditto	Ditto	West,	38	3
Ditto	South face	East,	34	3
Ditto	Ditto	West,	36	20
Mean vertical inc	lination of th	e north point		
of the marine dipping needle			36	41

The horizontal inclination or variation was about 60° eastwardly.

A continuation of very light winds made our progress very slow, through an ocean on whose surface great numbers of turtles, in every direction, were lying asleep, and we had only to lower down the boat, and without interrupting the progress of the ship, make choice of as many as we required; though under our present circumstances we would readily have waved the acquisition of these luxuries for a little more wind, as with that which now prevailed, the ship's motion through the water was scarcely perceptible.

We had again sight of the American coast on Sunday morning the 21st; it bore by compass from N. 5 E. to east, to N. 72 E.; but at so remote a distance that we lost every appearance of it by noon, when the observed latitude was 17° 56′, longitude 255° 52′, During the two preceding days we had very light variable winds from the eastward and S. E. with alternate calms, and very oppressive sultry weather; but by Thursday the 25th we had some little alleviation, as the wind then blew a moderate steady breeze from the north-westward. Whilst the light winds continued we were greatly incommoded by a very heavy swell from the south-eastward, which made the ship extremely uneasy; this had now in a great measure subsided; but the weather though perfectly clear was still very hot and sultry, the thermometer night and day varying from 81 to 83. Had it not been for our anxious solicitude to get forward, and the excessive heat of the weather, our situation would have been by no means unpleasant; the ocean was tranquil, and abounded with a great variety of fish; its surface as it were was covered with turtles, and the numerous sea fowls hovering over, and diving for their prey, presented such an animated scene, as the ocean, unassisted by intervening land, or other objects, is seldom, I believe, found to exhibit. We were here at no loss to provide a repast for this our fourth Christmas day since we had quitted the civilized world; and with the addition of the fresh beef, mutton, and poultry we had brought from Monterrey, the officers' tables presented such an appearance of luxury as is not frequently seen in such distant regions of the ocean. In addition to our fresh provisions, and what the sea afforded, the people were served such an extra allowance of grog as was sufficient for the celebration of the day, and to call to their recollection their friends and favorites at home; on which occasion, though perhaps the circumstance may appear too trivial here to be noticed, yet as the sentiment arose spontaneously from the gratitude of the crew, I am induced to mention it; the memory of Sen<sup>r</sup> Quadra, and the health of Tamaahmaah were not forgotten.

The same light baffling winds continued to impede our progress, which was tardy and irksome beyond all description; in addition to which, some of

our water casks were found to have leaked out; this, very contrary to my wishes, obliged me to restrain the allowance of water to three quarts a man per day. So very slowly did we proceed, that by Wednesday the 31st at noon we had only reached the latitude of 13° 50′, longitude 259° 5′ 30″; the latter was deduced from 116 sets of lunar distances, as follow, with the sun and aldebaran on different sides of the moon between the 27th and 31st of December. Those taken on the 27th, and brought forward by Arnold's No. 14, gave the following results.

The mean of

6	sets Da 🜣 west of her, by	/	Mr. Whidbey,	259 °	38	50	"
4	ditto		Mr. Baker,	259	32	45	
6	ditto		Mr. Manby,	259	52	45	
6	ditto		Mr. Orchard,	259	50	27	
6	ditto, taken on 29th, by		Mr. Whidbey,	259	45	40	
6	ditto		Mr. Baker,	259	37	35	
6	ditto		Mr. Manby,	259	55	22	
6	ditto		Mr. Orchard,	259	56	35	
6	) ab aldebaran east of her	r,	Mr. Whidbey,	259	52	2	
6	ditto		Mr. Baker,	260	14	17	
4	ditto		Mr. Manby,	260	8	10	
6	ditto		Mr. Orchard,	259	55	38	
6	D a ☆ west of her, taken ?	31st	Mr. Whidbey,	259	46	50	
6	ditto		Mr. Baker,	259	41	47	
6	ditto		Mr. Manby,	259	47	43	
6	ditto		Mr. Orchard,	259	47	2	
4	ab aldebaran east of her	r,	Mr. Whidbey,	259	52	4	
6	ditto		Mr. Baker,	259	58	10	
6	ab aldebaran east of her	r,	Mr. Manby,	259	55	7	
6	ditto		Mr. Orchard,	260	1	52	
3	ditto		Myself,	259	58	25	
3	days' observations, in	28 sets,	Mr. Whidbey,	259	47	5	
	ditto	28	Mr. Baker,	259	48	55	
	ditto	28	Mr. Manby,	259	55	51	
	ditto	29	Mr. Orchard,	259	54	19	

The mean of the whol	e, collectively ta	iken, being the			
result of 116 sets of	of lunar distance	s, shewed the			
longitude, at noon	on the 31st of [	December, 1794,			
to be			259	51	45
At which	h time Arnold's	No. 14 shewed	260	6	30
		No. 176	260	53	36
	Kendall's		260	46	45
	A1 1 41		260		

And by the dead reckoning 260

Hence, as I considered the longitude deduced from the lunar observations to be correct, or nearly so, it will appear evident that the chronometers, since the commencement of the very hot weather, had been gaining considerably less than the rate we were allowing as ascertained at Monterrey; for which reason a new rate was, from these and subsequent observations, found and adopted for pointing out our longitude, by the chronometers, from this station southward to the island of Cocos.

By this mode No. 14, at noon, on the 31st of December, appeared to be fast of mean time at Greenwich,	5 <sup>1</sup>	<sup>1</sup> 31	' 36	" 45 <i>"</i> "
And to be gaining on mean time per day at the rate of,			20	
No. 176, fast of mean time at Greenwich on the same day,	11	51	59	45
And to be gaining on mean time per day at the rate of,			41	5
Kendall's fast of mean time on the same day,	10	11	43	45
And to be gaining on mean time per day at the rate of,			21	35

## CHAPTER IV.

Visit the Island of Cocos—Some Description of that Island—Astronomical and nautical Observations there—Proceed to the Southward—Pass between Wenman's and Culpepper's Islands—See the Gallipagos Islands, and ascertain their Situation.

During our passage thus far from Monterrey, it did not appear that we had been much affected by currents, the log January 1795 and the observations having in general corresponded very nearly, and the difference between the longitude, by the dead reckoning, and that which I considered to be the true longitude, had not exceeded half a degree, the dead reckoning having been in general to the eastward of the truth

The wind in the north-western quarter continued to blow a steady breeze, and as we advanced to the south-eastward it increased in its force; the heat was less oppressive, and the mercury in the thermometer fell to a general temperature of about 78; the atmosphere was commonly clear, and the sea, which was remarkably smooth, abounded with immense numbers of flying fish, dolphins, bonitos, albicores, and a great variety of smaller fish; of turtles we easily procured as many as we could dispense with.

By noon on Monday the 5th we had reached the latitude of 9° 27′, and the longitude, brought forward from the preceding lunar observations, with the new rates of the chronometers, was shewn by Arnold's No. 14 to be 263° 36′ 15″, No. 176, 263° 34′ 15″, and by Kendall's 263° 40′; the dead reckoning at this time shewed 265° 33′; whence it became evident that we were now materially affected by a current setting to the westward, as this deviation had been gradually increasing since the 31st of December, and by our daily observations for the latitude, the direction of this current seemed to be irregularly between the north, sometimes corresponding, and at others to the south of the observations.

In this situation the vertical inclination of the magnetic needle was as under:

Marked end	North face	East	24	0	50
Ditto	ditto	West	25		30
Ditto	South face	East,	24		45
Ditto	ditto	West,	24		30
Mean inclina	24		54		

The variation being about 7½ degrees eastwardly.

The two succeeding days we were set to the southward, at the rate of about half a mile per hour, and on Wednesday the 7th the wind from the north-eastward again became very light, and I found it necessary to begin distilling fresh water from the sea; by this process, without any great additional expenditure of fuel, a supply of from twelve to eighteen gallons of fresh water was procured in the course of each day; and although it could not be considered of the first quality, yet it was perfectly fresh, and applicable to all the purposes of cooking. In this respect it was highly acceptable, as by the assistance of the distilled water, we were enabled to appropriate to greater advantage the abundant refreshments which the sea still continued to afford, and which were some compensation for the very tedious and tardy progress that the faint baffling winds permitted us to make.

Since Wednesday we had frequently noticed very strong riplings on the surface of the water, but felt scarcely any effects from currents. The observed latitude on Sunday the 11th was 7° 47′, longitude, by Arnold's No. 14, 266° 27′; No. 176, 260° 20′; Kendall's, 266° 33′; and by the dead reckoning 268° 32′; so that admitting No. 14, as I conceived it to be, nearest the truth, the error in the reckoning, since the 5th, had only increased 19′. The variation of the compass was now about 8° eastwardly. During the last week the clouds, particularly in the northern quarter, had sometimes hung about the horizon very dark and heavily, but they had now dispersed without any rain, excepting about noon on the preceding day, when we had a smart shower that lasted nearly two hours, and was the first rain that had fallen with us since our arrival at Monterrey in the beginning of November last.

As we thus gently advanced to the south-eastward, the riplings on the surface of the water became more frequent, and were attended with a greater degree of agitation, making a rustling hissing noise, like a tide in shoal

water; and though we felt something of their influence, they seemed infinitely more to affect the Chatham in her steerage; yet, from the result of our observations, they did not appear to be the consequence of any current, which gave rise to an idea, that probably the space we were then passing over was of very uneven bottom. To ascertain this fact soundings were tried, but no bottom was found in these riplings with 140 to 170 fathoms of line. During the night of Monday the 12th, and until noon the following day, we had a fresh breeze from the N. N. E., which afterwards veered round to the eastward and E. S. E., nearly in the direction in which I wished to steer. On Wednesday noon we had reached the latitude of 5° 37′, longitude 268° 31′, approaching nearly to the parallel of the island of Cocos, and about two or three degrees of longitude to the westward of its meridian, according to the different accounts of its situation in the ocean; and as we had no indication whatever of our having left it to the westward of us, our course was directed eastwardly, as the most probable means of finding the island.

We were still attended by vast numbers of fish, varying both in size and species; few birds were now about us, and the abundance of turtles was so much decreased, that, on Thursday the 15th, notwithstanding the day was for the most part calm, our boat's crew caught only two. The weather still continued clear, and gave us so good a view all around us, that had any land been within the limits of our horizon, it could not have escaped our notice. After having passed to the south of the 6th degree of north latitude, we again found ourselves under the influence of the current, that, during the 14th, had set us 18', in a direction S. 47 E., and, during the last twenty-four hours, at the same rate, in a direction N. 62 E. A light breeze springing up soon after noon from the north, we pursued our eastwardly course, intending to incline a little to the southward. This however we were prevented doing, from the current continuing to set to the E. N. E. at the rate of a mile per hour; so that at noon the following day, Friday the 16th, our observed latitude was 5° 51', and the longitude 269° 32'.

The tranquil state of the wind and sea, which with so little interruption had for such a length of time attended us, now seemed likely to undergo a very material change. A very heavy swell rolled from the westward, and the atmosphere became loaded with dense, heavy clouds, particularly between the S. E. and S. W.; in this direction our view was limited to a very few miles. The wind now blowing a gentle breeze from the N. W. a more southerly course was pursued, in the hope of regaining what we had lost by the current having driven us to the northward. Towards midnight, after about three hours calm, the wind came from the southward, and obliged us to steer again to the eastward; this I much regretted, as we had not, with all our

efforts, yet been able to get so far south, as the latitude assigned to the island we were in quest of, which according to Lord Anson's voyage is stated to be in 5° 20′, and by the Buccaneers in 5° 15′. I could not help being apprehensive, that a continuation of these adverse winds and currents would oblige us to pass to the northward of the island without seeing it; for, by our observations on Saturday the 17th, after making every allowance, instead of our being in latitude 5° 22′, which was shewn by the reckoning, the results of our meridional and double altitudes (which agreed extremely well together) proved our latitude to be 5° 46′, and that we were also several miles to the eastward of our account, the longitude being 270° 37′. The variation at this time was 8½° eastwardly.

Between this and the preceding noon, we had passed over upwards of a degree of longitude, without being able to see far to the south of the latitude of 5° 30′, owing to very thick hazy gloomy weather; hence it was very possible, that we might have passed to the northward of the island of Cocos. This was considered by some on board to have been highly probable, from the circumstance of our being now attended by vast numbers of the different species of birds that are generally found frequenting the shores of the uninhabited tropical islands; but this did not amount to proof, as those birds might have been attracted to the neighbourhood of our then situation by the great numbers of bonitos, albicores, and other fishes, with which the sea at that time abounded: and as we were successful in taking as many of them as we could make use of, they made us ample amends for the deficiency of turtle, which did not appear to be an object of much regard, as I believe most of us began to be tired of that food, which was only used to diversify our other provisions.

The currents with which we had met, shewed that little reliance was to be placed on the longitude, assigned to any land in this part of the ocean, from the testimony of those who had so long since visited these regions, but who had not been provided with the means we possessed for ascertaining the strength and direction of these streams.

For some days past we had been set considerably to the eastward, and as, from the several authorities I had consulted, it did not appear that we had yet reached the most eastern situation assigned to the island in question, the presumption was that it was still to the eastward of our present track; and although I should have been greatly mortified to have been obliged to abandon an object that had so much attracted my attention, yet, from the reduced state of our water in consequence of this unexpectedly tedious passage, and the worn-out and defective state of our water casks, the

reaching of the island of Cocos became a matter more of necessity than choice; as I was very unwilling to enter any port in the continent. There seemed, however, no prospect of effecting this, unless we should be able to shape such a course as would counteract the strength of the adverse northeasterly current. For this purpose, with the wind at S. S. W. we steered to the S. E. and in the evening had a tolerably distinct view a-head, but the southwest horizon was still obscured in dark dense clouds, and haze; the night was mostly calm, but in the following morning, Sunday the 18th, the weather was serene and clear, attended with a gentle breeze from the N. W., with which we steered to the south and at noon were in latitude 5° 33′, longitude 271° 7′; having been set during the last twenty-four hours 13′ to the north, and 11′ to the east of our reckoning.

The clear weather was not of long continuance in the southern quarter, although the opposite side of the horizon retained its former appearance; for by sun-set we could not see a mile from the ship in the eastern, southern, or south-western quarters. The various kinds of birds became more numerous, and having at length reached the stated parallel of the island, we plied during the night, which was attended by variable winds, some rain, and dark gloomy weather. This continued until noon the next day, Monday the 19th, when the observed latitude was 5° 14′, longitude 271° 9′; being 10′ to the north, and 4′ to the east of what the log shewed. The weather now admitted of an extensive view all round, but no land was in sight; and as the number of birds was considerably lessened, some additional reasons were offered in support of the former opinion, that we had left the island to the south-westward of us. Of this however I was by no means convinced, as in my several traverses over the Pacific Ocean, I had seldom found that such indications amounted to a proof of the very near vicinity of land.

With the wind between the south and S. W. although I had continued during the night to the south-eastward, we were not able to keep our southing; for the observed latitude at noon the following day, Tuesday the 20th, was 5° 16′, the longitude 271° 52′, which was 24′ further north, and 10′ further east than was given by our reckoning.

In the course of the last three or four days we had, in different instances, been deceived for a short time both by night and day, by very heavy dark clouds which assumed the appearance of land. Shortly after noon a similar resemblance was seen from the mast-head at a great distance, bearing E. N. E. which was not given credit to as being land, until aided by a gentle breeze and the current, we had approached nearer to it by three leagues, when it was decided beyond all question to be land. Concluding it to be the long-

looked for island of Cocos, at the distance of 14 or 16 leagues, the glad tidings were communicated by signal to our little consort. All the turtles had now left us, but we had still many fishes and sea fowl attending us, though these were not quite so numerous as on the preceding evening. The night was calm or accompanied with light variable winds, which continued with rain and dark gloomy weather until noon the next day, so that no observations could be obtained for ascertaining the ship's situation: we had however made some progress, as the island now bore by compass N. 73 E. to N. 81 E. not more than 6 or 7 leagues from us. In this we had been much assisted by the current setting us directly towards the land, the south-west extremity of which appeared in this point of view, to rise abruptly from the sea in deep rugged cliffs to a considerable height; and then in a moderate ascent to its most elevated part; this was a hill of no very great size; from whence it descended with a more uniform declivity to its northern extremity, which appeared like a detached islet.

The wind, which had been variable in the evening, became very light, and I was not without my apprehensions that the current might force us past the island, before we might have an opportunity of making choice of a situation for anchoring. That no time might be lost, about two in the following morning, being then sufficiently near the land for one of our boats to be in with the shores by day-light, Mr. Whidbey was dispatched in the cutter to make the necessary examination. During this and the three or four preceding nights the sea had presented a very luminous appearance, but I was not able to ascertain with satisfaction the cause of it. After the boat had left the ship, we used our utmost endeavours to preserve our station to the south-west of the island, but to no effect; the current soon after day-light drove us beyond its western end, and although our head was to the southwest, we were driven at a great rate past its northern side, within a few miles of its shores. These appeared to be indented into small bays, with rocks and islets lying near them; but they by no means exhibited that inviting appearance which has been reported of them by Lionel Wafer<sup>[2]</sup> and others. The shores were chiefly composed of broken perpendicular cliffy precipices, beyond which the surface rose unevenly to the summit of the island; the whole composing one rude connected thicket of small trees near the shore, but on the more elevated and interior parts many large spreading trees were seen; some cocoa-nut trees were also observed in the chasms of the rocky precipices, but they did not seem now to flourish in such abundance, as was most likely the case when their fruit gave a name to the island.

Being intirely without wind, the current sat us fast to the north-eastward from the land, which at noon bore by compass from S. 17 W. to S. 35 W.

distant seven or eight miles. The weather at this time afforded us a good opportunity for ascertaining the ship's place, which by several correct observations was found to be in latitude 5° 40′, longitude 273° 8′. By these and other observations that had been made on the 20th, the ship appeared to have been set by the current during the two days 60 miles, in a direction N. 50 E.; this shewed that the island, which we did not consider to be more than moderately high when first seen, was upwards of 20 leagues distant.

In the morning, as we were driving near to the shores of the island, some falls of water were observed descending from the cliffs into the sea, and as we stood much in need of this necessary article, as more of our casks were found to have leaked out, no small degree of impatience was experienced for the return of the boat, as her long absence had been attributed to want of success in finding a safe place for anchorage. This however did not prove to be the case, for her supposed detention was wholly occasioned by the great distance to which the current had set the ship from the island. About four o'clock I had the satisfaction of being informed by Mr. Whidbey, that the shores abounded with streams and falls of most excellent water, together with some cocoa-nuts, and plenty of wood for fuel, easily to be procured; especially in two small bays, both of which afforded anchorage sufficiently sheltered from the prevailing winds at this season of the year; the one on the north-east, the other on the north-west part of the island. Mr. Whidbey gave the preference to the most eastern, for which, therefore, with a light breeze from the north, we immediately steered, but were unable to stem the current till about nine at night, when the wind freshened from the N. E.; and with this, about four on Friday morning, the 23d, we reached the situation Mr. Whidbey had chosen, and moored in 33 fathoms water, sandy and gravelly bottom, and (so far as we became acquainted,) good holding ground, and free from rocks. The east point of the bay, which is a small conical islet lying close to the north-east extremity of the island, bore by compass S. 51 E. distant half a mile; the west point of the bay S. 75 W.; a steep rocky islet lying off it bore from S. 87 W. to N. 66 W.; and the watering place at the mouth of a very fine stream emptying itself over a sandy beach, S. 13 W. about three quarters of a mile distant; the Chatham moored within us in 26 fathoms water, on the same kind of bottom.

As soon as the ship was secured I went on shore, and found that all our wants could be easily supplied; that although there was some surf on the beach it was inconsiderable, and that not only water and fire wood, but that cocoa nuts were also to be procured in great abundance. No time was now lost in setting about obtaining a due supply of these essential articles, and in the performing such other business as had become requisite on board;

where, at noon, by the mean of four observations, with different persons and instruments, the latitude was shewn to be 5° 35′ 15″. This differing so materially from the latitude as stated in Lord Anson's and other voyages, and the general appearance of this island so little corresponding with the description given of the island of Cocos, especially by Dampier, and Wafer, gave rise to some doubts in my mind as to its being the identical island so described by those gentlemen. Be that as it may, the advantages it afforded us, not only in the articles already mentioned, but in an abundance of very fine fish, were very important; and as the soil was apparently capable of affording a variety of useful vegetables, this island did not fail to attract our particular attention; and being anxious to acquire every information respecting it that the short stay I purposed to make would allow of, I dispatched Mr. Whidbey on Saturday morning, the 24th, in the large cutter, to take a sketch of its shores. This service he performed, and returned about four in the afternoon, having found them to be composed of steep perpendicular rocky cliffs, with some islets and rocks lying near them; on which the sea broke with so much violence as to preclude any attempt to land in any part, excepting in the bay to the westward of the anchorage we had taken, where Mr. Whidbey had been before, and in that in which the vessels were moored; which were the only two situations on the island to which vessels could resort. On Sunday morning I made a short excursion to the western bay, and although a more copious stream of fresh water was found to flow into it, yet it is certainly not so eligible a situation for procuring the good things which the island afforded as that which we occupied. It was about half ebb when we reached its shores, where we landed with tolerable convenience. After we had breakfasted, we satisfied our curiosity in taking a view of the adjacent country; this was confined by an impenetrable thicket nearly to the limits of the sandy beach, which composes the bottom of the bay, where, on our return to the boats, we found some difficulty in re-embarking, owing to an increase of the surf which at that time broke upon the beach.

At the place on shore, where our operations were going on, I had observed evident marks of European visitors, from the trees having been felled with axes and saws, whilst the decayed state of the remaining stumps proved that they had not been very recently cut down. In this western bay, near to the fresh-water brook, a bottle was suspended on a tree, containing a note directed to the commander of any vessel that might visit the island, and signed "James Colnett;" stating, that the ship Ratler, South-sea whaler, of London, had arrived on the 26th of July, 1793, and, after procuring wood, water, and other refreshments, had proceeded on her voyage, all in good

health: that, previously to her departure, a breed of hogs and goats had been left on the island, and a variety of garden seeds had been sown, but the spot where these valuable articles had been deposited did not happen to fall within the limits of our observation.

By the time we reached the vessels the rain fell very heavily, and I became acquainted, on my arrival on board, that the surf had so much increased, as very materially to retard our business with the shore. The rain was accompanied by a fresh gale from the S. W. at the commencement of which the current, which, though by no means regular in its force, (sometimes being barely perceptible, at others running at least at the rate of two miles per hour,) yet had hitherto set uniformly to the E. N. E. now changed its direction and set to the westward, but at a very gentle rate.

This uncomfortable weather continued, though with some intermission, during the 26th; we, however, made great progress in completing our water and fuel, and having nearly exhausted the neighbouring shores of their cocoa-nuts, I dispatched two boats with Mr. Manby, the next morning, to the western bay, where they were produced in great plenty, to procure a full supply of them. The boats returned about noon, not having been very successful, as the heavy surf prevented their landing in that part of the bay where the fruit was most abundantly produced.

By the afternoon we had taken on board about thirty-five tons of water, with as much wood as we could stow; and having thus finished all our business with the shore, we quitted this island in the evening, and made the best of our way to the southward.

Having adverted to the situation and advantages which this small spot of land possesses, I shall now more particularly notice such matters as occurred to our observation whilst we remained there.

It does not appear from any account with which I am acquainted, to whom we are indebted for the discovery of this valuable little island; nor, indeed, do the several descriptions of the island of Cocos much accord with each other, or agree with what we found to be its situation or appearance. The island seen by Lord Anson, of which he was within sight for five days, and considered by him to be the island of Cocos, is stated in his voyage to be situated 13' to the south of what was found by our calculations to be the latitude of this island; and should this error in the latitude be considered as reconcilable, it is likely we may both intend the same island. I have not the least doubt that the island we last quitted is the same which Chipperton visited, and called it the island of Cocos. He, I should suppose, anchored in

the western bay, but his description is too confined to draw from thence any satisfactory conclusion; but the greatest difference is in the accounts given of the island of Cocos by Dampier and Lionel Wafer; these differ so very materially from our observations, in point of extent of situation and appearance, that their representations must either be excessively erroneous, or they must belong to some other island. After taking all these circumstances into consideration, it appeared to me by no means unlikely, that some other island might exist not very far remote from this, to which these apparently contradictory reports might more properly apply.

Two opinions were formed respecting an inscription that was found cut on a rock near to our watering place; the letters, which had been originally but ill executed, were much defaced.

## Look $\Upsilon$ as' you goe for ye I Coco.

This I considered as purporting, "Look to south as you go, for the island of Coco," but the more prevailing opinion amongst us was, that it meant, "Look as you go for the island of Coco," meaning this identical island. The defaced character after the word "look" might possibly have originally been intended to signify the north, yet as we met with no other in its vicinity, it is probable that this latter opinion was most correct; for which reason I have adopted the name of Cocos for the island in question.

According to the sketch made by Mr. Whidbey, the island of Cocos is about four leagues in circuit, lying in a N. E. and S. W. direction; it is about four miles long, and two miles broad, with several detached rocks and islets scattered about its shores; those lying off its south-west part extend to the greatest distance, which is nearly two miles, but they cannot be considered as dangerous because they are sufficiently high to be seen and avoided. The small bay in which we had anchored at the north-east end of the island is greatly to be preferred to the other westward of it; for the small islet that lies off its north-west point adds greatly to its protection from the wind and sea. The width of the bay from point to point of the two islets that form each of its extremities is about a mile, in a direction S. 52 E. and N. 52 W. and from this line its extent to the bottom of the bay is also about a mile; the soundings are regular from 12 to 50 fathoms, and vessels may ride very snugly within less than half a mile of the beach, in about 20 fathoms water, but in a less depth the bottom did not appear to be so free from rocks. The western bay is more extensive and more exposed, and its soundings are neither so regular, nor is the bottom so good; but from the abundance and great variety of vegetable productions that grow close to the verge of high

water mark in both bays, it should seem that neither of them are subject to very violent storms, or heavy seas. The climate was considered by us as temperate and salubrious, for although the thermometer was usually between 78 and 80, we did not feel that oppressive heat which we had experienced further to the northward; and notwithstanding that our people were greatly exposed to the heavy rains that fell while transacting our business on shore, yet not the least interruption from want of health took place, which in various other tropical islands frequently attends the execution of similar services.

This island cannot be considered as having a pleasant appearance in any one point of view, for although its inland surface is much diversified by hills and vallies; yet the only low land of any extent that we were certain it possesses is in the bottom of the two bays, each of which form the extremity of one of these vallies bounded by craggy precipices, from the foot of which extends a narrow strip of low flat land that terminates in a beach at the water side, resembling more the dreary prospect exhibited at the heads of the several branches of sea we had so recently explored on the coast of North-West America, than any thing else I could compare them to. Every other part of the shore seemed to be composed of steep, broken precipices of rock, of which substance the interior of the island was apparently composed, as the naked cliffs were frequently seen protruding their barren sides through the thicket, which otherwise covered the surface of the island. This thicket, so far as we were enabled to ascertain, was chiefly composed of a great variety of trees of a moderate size, with an impenetrable underwood of the vine or supplejack kind, which opposed any excursion into the country; some attempts were, I believe, made to penetrate thither by the water-course, but this, from rocky precipices and other obstructions, was found to be equally impracticable; our knowledge of its productions must consequently be confined to our observations on the small margin between the woods and the sea shore, the only part that was accessible to us. In respect of its future utility, the first object of consideration to maritime people is the abundant supply of water that it affords. This abounds in every part of the island, and is to be easily procured at the stations to which vessels can resort. From its purity and limpid appearance, and from its being destitute of any colour or unpleasant taste, either from dead leaves or other putrid or rotten matter, though very heavy rains had fallen during the time we had been at anchor there, it may reasonably be inferred that the larger streams of water have a more remote and permanent source than the accidental showers that at this season of the year may descend upon the island. The soil in the immediate neighbourhood of the streams that fall into each of the bays is of a poor,

loose, sandy nature; but at a little distance behind the beach, and in the fissures of the rocks, a rich black mould was observed, apparently capable of affording much vegetable nourishment; and this may also be the case in other parts of the island, although we had no power of ascertaining the fact. All its vegetable productions appeared to grow luxuriantly, and covered the island in one intire wilderness. On the rocky cliffs near the sea side, whose uneven surface admitted the growth of vegetables, a coarse kind of grass is produced, that afforded an excellent retreat for the different kinds of sea fowl which resorted thither to roost and build their nests, or more properly speaking to lay their eggs, as they are at little pains to form a nest of any description. About these cliffs grew a very particular kind of tree, something like the cloth plant of the South-Sea islands, but much larger; some of these grow to the height of about thirty feet, are of a lightish coloured bark, free from branches to the top, which is somewhat bushy, and for that reason was called by us the umbrella tree. There were some few other trees whose foliage strongly resembled that of the bread fruit, but as no one of them was in bearing near the beach, I was not able positively to determine their species. Many of the trees that composed the forest, especially in the interior and elevated parts of the island, seemed to be of considerable size, spreading out into large branches towards their tops, which in point of height greatly surpassed the others. I was inclined to believe that these trees were of the same sort with those from which we principally obtained our fuel, although near to the sea side they did not grow so large as on the hills; Mr. Manby, who most commonly superintended that service, gave me the following account of them. This tree is very generally produced all over the island, its trunk grows very straight to the height of twenty or thirty feet before it throws out its branches, which are so close, large, and spreading, as to afford extremely good shelter against both sun and rain; the stems of several were capable of squaring to twelve or fourteen inches; the grain is close, somewhat variegated, and reddish towards the heart; it yielded to the axe with tolerable ease, to the saw it was equally fitted, and being free from knots, it split without much labour; its leaves are of a dark green colour, smooth at the edge, and not much unlike the laurel, though rather longer; the seed resembling a small acorn is borne in clusters. The wood is well calculated for burning. Mr. Manby describes another sort, (which we cut for fuel also,) as having a whitish smooth bark, growing tall and straight, and producing but few branches. Its leaf is large, and in shape resembling that of the horse-chestnut, of a light green colour, with a velvet surface; it appeared to be fit for little else than firewood, and not the most proper even for that purpose, as it has a thick pith in the centre of it that occupies a large portion of the stem or branches. The wood is of a white close grain, splits readily,

but does not burn remarkably well. The cocoa-nut trees, which grow not only on the seashore but high up on the sides of the hills, were the only trees we saw that bore any fruit, although, in one of the rivulets, an unripe guava was picked up, which, most probably, had come from the interior country: in addition to these, we noticed an abundance of different sorts of fern, some of which produced a stem nearly six inches in diameter, and grew to the height of nearly twenty feet; these, as well as I recollect, were exactly of the same description as those commonly found in New Zealand. Such were the most general vegetable productions of this island that fell under our observation, to which we further added the seeds of apples, peaches, melons, pumkins, with beans, peas, &c. These were sown by Mr. Swaine, in a spot cleared for that purpose, where he was of opinion they were likely to thrive.

With respect to the animal kingdom, fish and fowl seemed to be in great abundance, and we entertained hopes that future visitors may benefit by Captain Colnett's liberality; as just before Mr. Swaine left the island a young hog, in very excellent condition, was seen by him and some of his party, but on his discovering our people he hastily retreated into the thicket. Although at no very great distance from the island we had seen such numbers of turtle, it was singularly remarkable that there was not the most distant sign of their resorting to these shores. The land abounded with white and brown rats, and vast numbers of land crabs. All the birds of the oceanic tribe, common to the tropical regions, repaired hither in great flocks, and were by no means bad eating. Besides these were seen hawks, a species of brown and white herons, rails, a kind of blackbird, and a few others, that chiefly inhabited the woods; which, with some ducks and teals, were what was observed principally to compose the feathered race. A great variety and abundance of excellently good fish frequented the shores; sharks also were very numerous, and the most bold and voracious I had ever before seen. These assembled in the bay in large shoals, constantly attended on our boats in all their motions, darting at the oars, and every thing that by accident fell, or was thrown overboard. They frequently took the fish from the hooks before they could be got clear of the water, and what was still more singular, when one of their own species was so taken, and they perceived he could no longer defend himself, he was instantly attacked, torn to pieces, and devoured by his companions, whilst yet alive; and, notwithstanding that these monsters subjected themselves to be greatly annoyed by the harpoons, knives, &c. of our people, by which they received many deep wounds, yet even that did not deter them from renewing the attack upon the one which was caught, until every part of the victim's flesh was thus torn from its bones. On this occasion we had an opportunity of observing, that it is erroneous to suppose

the shark is under the necessity of turning on his back for the purpose of taking his prey, as these sharks most commonly attained their object without first turning themselves, as has been generally believed.

The general warfare that exists between seafaring persons and these voracious animals, afforded at first a species of amusement to our people, by hooking, or otherways taking one for the others to feast upon, but as this was attended with the ill consequence of drawing immense numbers round the ship, and as the boatswain and one of the young gentlemen had nearly fallen a sacrifice to this diversion, by narrowly escaping from being drawn out of the boat by an immensely large shark, which they had hooked, into the midst of at least a score of these voracious animals, I thought proper to prohibit all further indulgence in this species of entertainment; which, independently of its being likely to be attended with serious consequences, was in itself of too cruel a nature to be witnessed without pain. These sharks appeared to be of three distinct sorts; the most numerous were of the tyger kind, these were beautifully streaked down their sides; the other sorts were the brown and the blue sharks; and it was singularly remarkable, that although they all voraciously devoured the two former species, yet when one of the latter was caught, it remained unmolested by the rest, and even when killed, and cut up, its flesh was not eaten by its companions.

The other kinds of fish that fell under my notice, beside those common to the tropical seas, were two sorts of bream, the large snapper of the West Indies, a sort of rock fish, and another kind commonly called yellow tail; these were all very excellent, and took the hook readily; and to those who may follow us, and stand in need of refreshments, they may prove a most desirable resource; and there can be little doubt but that persons under such circumstances would soon fall upon some expedient, to evade the inconvenience to which they might be liable from the extreme vigilance of the sharks. Nor is it improbable, that on a more minute examination, the surface of this little island may be found to produce many articles of refreshment; but as we did not stand much in need of any, excepting the necessary article of water, our attention was not directed to such inquiries, being wholly engrossed in using every possible means of dispatch in providing ourselves with those few particulars with which we could not dispense.

We happily stood in no great need of searching for refreshments at any great distance from the shores of the island; for, excepting that I continued to be in a very feeble and debilitated state, there was not on board either of the vessels a single individual who was not in the highest health imaginable. In

consequence of the indisposition under which I had so long laboured, I was only able to go once on shore in each of the bays, or I might possibly have acquired more knowledge respecting this small though valuable spot of land. The comfort we derived from the water, and the few other supplies there obtained justly intitled it to our consideration; and as from its situation it is not unlikely that it may become a place of importance to those whose pursuits may direct them to this part of the Pacific Ocean, I trust I shall be excused for having dwelt so long on a subject which I could not but regard as deserving attention; not only as far as it respects the productions of the island, but also to shew, that the description of the island of Cocos given by Dampier from the observations of others, and that stated by Lionel Wafer from his own, are either extremely inapplicable to its present circumstances and appearance, or have reference to some other island in its neighbourhood. It is much to be regretted that Dampier had not himself visited this island, as from the great accuracy of most of the observations made by that judicious traveller, few doubts could have arisen concerning the identity of the island he meant to describe. I am more inclined to attribute this deviation from the truth to misrepresentation, than to any other cause, from our having acquired a tolerably competent knowledge of that part of the ocean between the 5th and 6th degrees of north latitude, for at least four degrees of longitude to the westward of the island in question, in which space there is not much likelihood of there being any other island.

For the purpose of commemorating our visit to the island of Cocos, I directed that the date of our arrival, with the names of the vessels and the commanders, should be cut on the same rock where the other inscription was found: the two former I understood was executed, but it seems that some obstacle arose to prevent the insertion of the latter. The reasons before stated for supposing that this island may hereafter prove useful to those who may traverse these seas, demanded that the utmost attention should be paid to the fixing with accuracy its true position. By the result of all our observations, comprehending 152 sets, taken between the 29th of December 1794, and the 16th of January 1795; and 155 sets taken afterwards between the 28th of January, and the 16th of February following, the longitude of the anchorage deduced thus from 306 sets of lunar distances from the sun and stars, each set as usual containing six observations, appeared to be as follow:

The mean

37	sets on both sides $\Im$	before our arrival by	Mr. Whidbey,	272	° 54	′ 46	"
37	ditto	ditto	Mr. Baker,	273	1	43	
37	ditto	ditto	Mr. Manby,	273	3	3	
38	ditto	ditto	Mr. Orchard,	273	4	58	
3	ditto	ditto	Myself,	273	2	55	
32	ditto	after our departure	Myself,	273	8	42	
34	ditto	ditto	Mr. Whidbey,	273	10	38	
36	ditto	ditto	Mr. Baker,	273	14	55	
25	ditto	ditto	Mr. Manby,	272	53	15	
27	ditto	ditto	Mr. Orchard,	273	21	53	

The mean of the whole 306 sets collectively taken, and reduced to the anchorage by Arnold's No. 14, according to its new rate, shewed the true longitude to be

273
5
34

From this authority, and from several sets of altitudes of the sun carefully taken whilst in the bay, the errors and rates of the chronometers were found to be as follow:

Arnold's No. 14, fast of mean time at Greenwich at noon on the 27th of January 1795,	5	h	41	,	3	"	20	"
And to be gaining per day on mean time at the rate of					20		2	
Arnold's No. 176, fast of mean time at Greenwich at same time,	12		11		18		20	
And to be gaining per day on mean time,					41		5	
Kendall's fast of mean time at Greenwich at same time,	10		21		19		20	
And to be gaining per day on mean time					21		35	
The latitude by twenty meridional altitudes of the sun and sea horizon, by the back observation taken by five different observers with different instruments, and varying from 5° 33′ to 5° 3′ 20″, shewed the mean result to be	5		35		12			
The longitude according to the Monterrey rate	was	,						

By Arnold's chronometer,	No. 14,	273 °	36 ′	40 "
Ditto ditto	176,	274	47	55
And by Kendall's,		274	55	10

By which it appeared that No. 14 was 31' 5", No. 176, 42' 20", and Kendall's chronometer, 1° 49' 35" to the eastward of the true longitude.

The variation of the compass by four sets of azimuths differing from 8° 14′ to 7° 21′, shewed the mean result to be 7° 45′ eastwardly.

The vertical inclination of the magnetic needle,

Marked End,	North Face	East,	19 °	47
Ditto	ditto	West,	20	17
Ditto	South Face	East,	19	17
Ditto	ditto	West,	19	40
Mean inclinati	10			
needle,			19	45

The rise and fall of the tides were, by the shore, found to be very considerable and regular twice in the twenty-four hours without any apparent stream, and were not in the least influenced by the currents. The night tides appeared to be the highest, and were estimated to rise nearly ten feet perpendicularly, though the surf was too high to admit of any correct measurement. The time of high water was pretty clearly ascertained to be about  $2^h$  10' after the moon passes the meridian.

Having, as before stated, put to sea from the island of Cocos, on the evening of the 27th of January, and having no intention of stopping short of the island of Juan Fernandez, or some port on the coast of Patagonia, for the purpose of again recruiting our water and store of firewood, the ship's course was directed southwardly, but with so gentle a breeze during the night, that although we had all sail set, yet, in the morning of Wednesday the 28th, the island continued in sight until about nine in the forenoon, when it bore by compass N. 30 W., distant forty-six miles; shortly after this time we lost sight of it, not from its being beneath the horizon, but from its being obscured by clouds and an haziness in the atmosphere. At noon the observed latitude was 4° 43′, the longitude 273° 17′; by which it appeared that, since quitting our anchorage, a current had set us in a direction S. 12 E., eighteen miles. In the afternoon such immense shoals of fish were playing about on the surface of the water as to be mistaken at first for breakers. During the night the wind was very light from the westward, and on the following morning, Thursday the 29th, the weather was calm, with very heavy rain; but in the forenoon, although the atmosphere continued very gloomy, we procured the necessary observations to shew the latitude to be 3° 29', the longitude 273° 25', whence we appeared to have been set by a current 46 miles, in a direction S. 5 E.; a few turtles were this day about the ship, some of which were taken. In the afternoon we had a light breeze variable between the east and S. S. E., with which we stood to the south-westward; the night was nearly calm with very heavy rain, but the next morning, Friday

the 30th, we had again a south-easterly breeze with some rain, which in the forenoon ceased, and permitted us to observe the latitude at noon to be 2° 35', which was 30' to the south of what was shewn by the log. With a moderate breeze, varying between S. by W. and S. E. we stood on such tacks, as would enable us to make the best of our way to the southward, and at noon on Saturday the 31st the observed latitude was 2° 11′, the longitude 272° 12′, from which it appeared that the current during the last twenty-four hours had set us 12 miles to the south, and from the 29th at noon 41 miles to the westward. Since leaving the island of Cocos we had observed many riplings on the water, and had experienced an uncomfortable irregular swell from the southward. On Sunday the 1st of February the weather became more pleasant, and the wind at S. S. E. blew February 1795 so steady a breeze, that I concluded we had at length reached the regular trade wind. In the forenoon we passed by some sea weed and drift wood, a cocoa-nut, and a stick of sugar cane about nine feet long; all of which, excepting the former, appeared to have been no great length of time in the water. The observed latitude at noon was 1° 31′, longitude 270° 26′; the former agreed exactly with the log, but by the latter we appeared to have been set since the preceding noon 10 miles in a west direction. The vast numbers of fish that still attended us afforded us a very profitable amusement, and many birds were still about us. The wind which now hung far to the south, obliged us to make a much more westerly course than I could have wished, as I had entertained hopes of being able to pass near enough to the Gallipagos islands to have had an opportunity of ascertaining their true situation; but as the westernmost of them are said to be under the meridian of the island of Cocos, which was now nearly three degrees to the eastward of us, the chance of succeeding in this expectation was now so little, that I gave up every idea of accomplishing that object.

Land was discovered on Monday forenoon to the W. S. W.; it then appeared to be a very small island, which at noon bore by compass S. 72 W., eight or nine leagues distant. As our observed latitude was 1° 26′, longitude 268° 43′, and the variation of the compass 8° eastwardly, we appeared to have been set in the course of the last twenty-four hours 10 miles to the north, and 28 miles to the westward. The influence of this current setting to the W. N. W. was very perceptible, for although with a light air of wind during the afternoon our course was directed to the south-westward, yet so rapidly were we driven in the above direction of the current, that, at sun-set, this island bore by compass S. 46 W., and another island, which had been discovered about an hour and an half before, bore, at the same time, N. 72 W. During the night we had a light breeze from the S. S. W., with which we

stood to the S. E.; but so far were we from stemming the current, that, at day-light on the following morning, Tuesday the 3d, the first of these islands bore by compass S. 68 E., distant six leagues, and the second N. 17 W., 12 miles distant. At such a rate had we been driven by the current between these islands, that, notwithstanding we used every endeavour to preserve our station by keeping as the wind veered on the most advantageous tacks, yet, at noon, the first island bore by compass E. by S., at the distance of nine leagues, and the other N. N. E. ½ E., at the distance of 17 miles. In this situation the observed latitude was 1° 28′, longitude 267° 49′, by which the current appeared to have set us, since the preceding day at noon, ten miles to the north, and fifty miles to the westward.

In passing between these islands, which lie from each other N. 42 W. and S. 42 E., at the distance of twenty-one miles, we observed neither danger nor obstruction; the southernmost, which is the largest, did not appear to exceed four miles in circuit, and the northernmost about half a league; the former is situated in latitude 1° 22′ 30″, and longitude 268° 16′. Its north-western side forms a kind of long saddle hill, the northern part of which is highest in the middle, and shoots out into a low point, which at first sight was considered by us to be an islet, but was afterwards believed to be united. A small peaked neck or islet lies off its south-west side, which, like all the other parts of it, excepting that towards the north, is composed of perpendicular naked rocky cliffs. On the low north-west part we saw what we supposed to be trees, but we were by no means certain, for the island in general presented to us a very dreary and unproductive appearance. The northernmost island rose in naked cliffs from the sea, off which are two islets, or small rocks; that on its east side is remarkable for its flat table top, and for its being perforated nearly in the middle. The situation of these islands, the easternmost being nearly 5° to the westward of the meridian of the island of Cocos, gave us at first reason to suppose them a new discovery, and not a part of the group of the Gallipagos, as all the ancient accounts agree in placing the Cocos due north from the westernmost of that cluster of islands; but when we took into consideration the very rapid currents by which we had been controlled, they easily accounted for errors to which other navigators must necessarily have been subjected, who have not, like ourselves, been so well provided with the means of ascertaining the full effect of their influence; which had, since our leaving that island, produced a disagreement of upwards of two degrees of longitude in our dead reckoning. The decision of this point remained, therefore, to be determined by our further progress to the south; for, in the event of the first or southernmost, being Wenman's island, and the most northern, that called Culpepper's

island, the northernmost of that group of islands, little doubt was entertained of our meeting with more of them in pursuing our southern course; in doing which we were not very expeditious the two succeeding days, as the wind between S. S. W. and S. S. E. was very variable in point of strength; and although we endeavoured to take every advantage it afforded, so little progress did we make against the adverse current, that on the 5th, the most southern of these two islands was still in sight, and at noon bore by compass N. 31 W., distant eight or nine leagues. The observed latitude at this time was 59', longitude 268° 27', by the dead reckoning 271° 24'; having, in the last twenty-four hours, been set by the current seven miles to the north, and forty-eight miles to the westward. As we were now approaching the equator, and as the sea was tolerably smooth, some further observations were made on the vertical inclination of the magnetic needle, which shewed

The marked end	North face	East,	7	0	8	,
Ditto	ditto	West,	8		3	
Ditto	South face	East,	7		28	
Ditto	ditto	West,	7		18	
Mean inclination,			7		28	

The variation of the compass, at the same time,

8 eastwardly.

We advanced so slowly from these islands, that at sun-set the southernmost of them was still within our view, bearing by compass N. 12 W. The wind was mostly at S. S. W. during the night, with this we stood to the south-eastward, and at day-light on Friday morning the 6th, discovered a more extensive land than the two islands we had just passed, bearing by compass from S. 10 E. to S. 35 E. This land appeared to be very lofty, to be at a considerable distance from us, and to be divided into three or more islands; but as we approached it the less elevated parts were seen to be connected, so that, in the forenoon, it seemed to be only divided into two portions, and even this division was rendered doubtful, as we drew nearer to it, by the low land rising to view until about noon, when the whole extended by compass from S. 42 E. to S. 10 E., with a detached rock S. 2 W. In this situation the observed latitude was 28' north, the longitude 268° 32'; having been set, in the last twenty-four hours, by the current twenty-six miles to the westward. This, however, appeared to have taken place in the early part of that day, as since our having made the land in the morning, we had approached it with a light breeze, without having apparently been influenced by any current whatever.

In the afternoon a pleasant breeze sprang up from the south-westward, with which we stood close-hauled in for the land, and before sun-set saw very plainly, that what had for some hours before considered to be two islands, was all connected by depressed land on which was a hummock, that had also appeared like a small island; and beyond this low land, at a considerable distance to the southward, was seen an extensive lofty table mountain. The land immediately before us formed also towards its eastern extremity a similar table mountain, and towards its western point a very regular shaped round mountain, which, though not of equal height to the others, was yet of considerable elevation, and in this point of view seemed to descend with great uniformity. The easternmost, terminating in a low point with some small hummocks upon it, at six in the evening bore by compass S. 47 E.; the westernmost, which terminated more abruptly, S. 13 W.; and the detached rock, which is steep, with a flat top, S. 71 W. The whole of this connected land appeared now to form an extensive lofty tract; and as I had no intention of stopping, the object for consideration was, on which side we should be most likely to make the best passage? The southwest wind from its steadiness, and the appearance of the weather, seemed to be fixed in that quarter, and as we approached the shore we found a strong current setting to windward; I therefore did not hesitate to use our endeavours to pass to the westward of this island, which under all circumstances appeared to me to be the best plan to pursue.

We drew in with the island until about nine at night, when we were within about a league of its shores, and finding that the windward current was the strongest near to the land, the night was employed in making short trips between the shores of the island and the flat rock before mentioned. frequently trying for soundings with 100 fathoms of line without success. On Saturday the 7th, we were nearly up with the western extremity of the island, and as the weather was fair and pleasant with a very gentle breeze of wind, I wished, whilst the ship was turning up along shore, to acquire some knowledge of what the country consisted, and for that purpose immediately after breakfast Mr. Whidbey, accompanied by Mr. Menzies, was dispatched with orders to land somewhere to the southward of the western extremity of the land then in sight, which had been named Cape Berkeley. The part of the island we were now opposite to, and that which we were near to the preceding evening forming its north-western side, either shoots out into long, low black points, or terminates in abrupt cliffs of no great height, without any appearance of affording anchorage or shelter for shipping. The

surf broke on every part of the shores with much violence, and the country wore a very dreary desolate aspect, being destitute of wood and nearly so of verdure to a considerable distance from the sea side, until near the summit of the mountains, and particularly on that which formed nearly the north-western part of the island; where vegetation, though in no very flourishing state, had existence.

The observed latitude at noon, being then within four or five miles of its shores, was 7½' north, the longitude 268° 29½'; in which situation the steep flat rock, called Rodondo rock, bore by compass N. 26 W.; the easternmost part of the island now in sight, N. 78 E., and cape Berkeley in a line with more distant land, supposed by us to be another island, south. As we advanced, the regular round mountain assumed a more peaked shape, and descending with some inequalities, terminated at the north-west extremity in a low barren rocky point, situated according to our observations in latitude 2' north, 268° 30′ east. From it the steep flat rock lies N. 2 W., distant 12 miles; and the shores of the north-west side of the island, so far as we traced them, took a direction about N. 50 E. sixteen miles; the wind for the most part of the day continued light and variable between the west and S. W., but with the help of the current which still continued to run in our favor, we passed in the afternoon to the south of cape Berkeley, from whence the shores to the southward of that point take a rounding turn to the eastward, and shoot out into low rocky points. The interior country exhibited the most shattered, broken, and confused landscape I ever beheld, seemingly as is formed of the mouths of innumerable craters of various heights and different sizes. This opinion was confirmed about five in the afternoon on the return of Mr. Whidbey and his party, from whom I understood, that about two leagues to the east south-eastward of cape Berkeley, a bay had been discovered round a very remarkable hummock, which seemed likely to afford tolerably good anchorage and shelter from the prevailing winds; but as Mr. Whidbey had little time to spare, and as the shores afforded neither fuel nor fresh water, he was not very particular in this examination, but endeavoured to gain some knowledge concerning the general productions of the country. During the short time the gentlemen were so employed on shore, those remaining in the boat, with only two hooks and lines, nearly loaded her with exceedingly fine fish, sufficient for ourselves, and some to spare for the Chatham. Our opinion, that this part of the island had been greatly subject to volcanic eruptions, appeared by this visit to have been well founded; since it should seem, that it is either indebted for its elevation above the surface of the ocean to volcanic powers, or that at no very remote period it had been so profusely covered with volcanic matter, as to render its surface incapable of more than the bare existence of vegetables; as a few only were found to be produced in the chasms or broken surface of the lava, of which the substratum of the whole island seemed to be composed. Instead of the different species of turtles which are generally found in the tropical, or equatorial regions, these shores, however singular it may seem, abounded with that description of those animals which are usually met with in the temperate zones, bordering on the arctic and antarctic circles: the penguin and seals also, some of which latter I understood were of that tribe which are considered to be of the fur kind, were seen, as likewise some guanas and snakes; these, together with a few birds, of which in point of number the dove bore the greatest proportion, were what appeared principally to compose the inhabitants of this island; with which, from its very uncommon appearance, I was very desirous to have become better acquainted; but we had now no time to spare for such an inquiry, nor should I indeed have been able personally to have indulged my curiosity, as I still continued to labour under a very indifferent state of health, which in several other instances had deprived me of similar gratifications.

At sun-set the steep flat rock bore by compass N. 5 W. and the land in sight from N. 56 W. to S. 9 E.; the former, being the north-west point of the island, and the latter, the land that was stated at noon to be in a line with it, still at a considerable distance from us; both of which seemed to form very projecting points, from whence the shores retired far to the eastward; but whether only a deep bay was thus formed, or whether the land was here divided into two separate islands, our distance was too great to determine.

In the evening the wind freshened from the S. S. W. with which we plied to the southward, and having still the stream in our favor, we kept near the shore where the current continued to be the strongest. At midnight this breeze was succeeded by a calm, which lasted until day-light the next morning, when, with a light breeze, and the assistance of the current, we made some progress along shore. As we advanced, land further distant, and apparently detached, was discovered to the S. S. E.; at noon the observed latitude was 18½' south, the longitude 268° 23'; in this situation we were opposite to the land mentioned the preceding day at noon. This takes a circular form, and shoots into several small low projecting points. From the most conspicuous of these, called cape Douglas, the adjacent shores take on one side a north-eastwardly, and on the other a southerly, direction. The above, being the nearest shore, bore by compass N. 78 E. distant five miles; the southernmost part of this land in sight S. 39 E.; the west point of the lastdiscovered detached land, which is named Christopher's point, S. 28 E.; and cape Berkeley N. 14 W. The land we were now abreast of bore a strong resemblance to that seen the preceding day, equally barren and dreary towards the sea side, but giving nourishment to a few scattered vegetable productions on the more elevated part, which rose to a table mountain of considerable height and magnitude, and is the fourth mountain of this table-like form of which this land is composed.

The wind, during the afternoon and night, blew a gentle breeze from the southward, but as we continued to be assisted by the current setting to windward, we made some progress in that direction, and were sufficiently to the southward the next morning, Monday the 9th, to ascertain pretty clearly that the last-discovered land, now bearing S. 54 E. distant nine leagues, was distinct from the second-discovered land, or island; and that its western part, Christopher's point, lies from the south point of the second-discovered land, which is called cape Hamond, S. 13 E. at the distance of twenty miles.

Thus concluded our examination of these shores, which proved to be those of the Gallipagos islands. The wind now seemed to be settled in the south-eastern quarter, blowing a steady pleasant gale; and as the weather was fine, we were once more flattered with the pleasing hopes of having at length reached the regular south-east trade wind; we therefore made the best of our way to the south-westward with all sail set, and at noon observed we were in latitude 44' south. The longitude by the several chronometers, agreeably to their rates as ascertained at the island of Cocos, was by

Arnold's	No. 14,	267 °	54 ′	30	"
Ditto	176,	267	52	45	
Kendall's,		267	52	30	
But by the dead rechappeared to be	272	2	0		

The variation of the surveying compass was 8° eastwardly, and the vertical inclination of the marine dipping needle was,

Marked End,	North face	East,	2	0	50	
Ditto	ditto	West,	2		45	
Ditto	South face	East,	2		30	
Ditto	ditto	West,	2		30	
Mean inclination of the north point of the marine dipping						
needle,			2		29	

The very exact correspondence of the longitude by the chronometers, and which had uniformly been the case ever since our departure from the island of Cocos, induced me to believe, that at least the relative position in point of longitude of that island with these would be found correct; and I trust, that the means adopted to ascertain the longitude of the former, will not be found liable to any material error.

On reference to the relative portion of the land to which our attention had been directed since the 6th of this month, the delineation of its shores from our observations, will be found to bear a very striking resemblance to that of the westernmost of the Gallipagos, as laid down in Captain Cook's general chart; and although the situation of Wenman's island does not correctly agree, yet the correspondence of the larger portions of the land with the above chart, is doubtless a further confirmation of their being the same as is therein intended to be represented; from whence I should suppose, and that the first and third portions of land seen by us constituted Albemarle island, and that the second was Narborough's island. These names were given by the Buccaneers, as also that of Rodondo rock to the steep flat rock, and Christopher's point to the west point of the third land; and under this persuasion, this is the south-west point of Marlborough island, which is situated according to our observations in latitude 50' south, longitude 268° 34' east.

From these conclusions, all the objects I had had in view in steering this south-eastwardly course from Monterrey appeared to have been accomplished; since I had not entertained the most distant intention of stopping, to make surveys or correct examinations of any islands we might see. But as the situation of those which were lying not far out of our track had been variously represented, I anxiously wished to obtain such information as would place this matter out of all dispute for the future; and having been enabled to effect this purpose to my satisfaction, it was some

recompence for the very irksome and tedious passage we had experienced in consequence of the light baffling winds that had constantly attended us after we had passed cape Corientes; since which time, to our station this day at noon, our progress upon an average had not been more than at the rate of 10 leagues per day.

I shall now proceed to state, what little more occurred to my knowledge or observation respecting that part of the Gallipagos islands that we were now about to leave. The climate appeared to be singularly temperate for an equatorial country. Since our departure from the island of Cocos the mercury in the thermometer had seldom risen above 78, and for the three preceding days it had mostly been between the 74th and 76th degree; the atmosphere felt light and exhilarating, and the wind which came chiefly from the southern quarter was very cool and refreshing. The shores appeared to be steep and bold, free from shoals or hidden dangers; some riplings were observed, which at first were supposed to be occasioned by the former, but as soundings were not gained when we were in them, these riplings were attributed to the meeting of currents. The lofty mountains of which this land is principally composed, excepting that which forms its north-western part, appeared to us in general to descend with much regularity from a nearly flat or table summit, and to terminate at the base in projecting points on very low level land; so that, at a distance, each of these mountains appeared to form a distinct island. This circumstance may probably have given rise to the different statements of former visitors concerning the number of this group of islands; all of them however agree in their affording great stores of refreshment in the land and sea turtles, in an abundance of most excellent fish of several sorts, and in great numbers of wild fowl. Our having seen but few turtles whilst in the neighbourhood of these islands, is no proof that these animals do not resort thither; for in the sea we saw neither seals nor penguins, yet the shores were in a manner covered with them; and in addition to this, the parts of the coast that were presented to our view consisted principally of a broken, rugged, rocky substance, not easily accessible to the sea turtle, which most commonly, and particularly for the purpose of depositing its eggs, resorts to sandy beaches. With respect to fish, we had ample proof of their abundance, and of the ease with which they are to be taken; but in regard of that great desideratum, fresh water, some assert that the islands afford large streams, and even rivers; whilst others state them to possess only a very scanty portion, or to be nearly destitute of it. This however is but of little importance, as, from their vicinity to the Cocos, where perpetual springs seem to water every part of the island, vessels standing in need of a supply, may easily procure a sufficient quantity for all

purposes; and since we saw in their neighbourhood many whales which we conceived to be of the spermaceti kind, it is not unlikely that these shores may become places of desirable resort to adventurers engaged in taking those animals. Notwithstanding that our visit did not afford an opportunity for discovering the most eligible places to which vessels might repair; it nevertheless, by ascertaining the actual situation of the western side of the group, has rendered the task of procuring such information more easy to those, who may wish to benefit by the advantages these islands may be found to furnish.

I shall now take my leave of the Gallipagos islands, and with them also of the North Pacific Ocean, in which we had passed the last three years.

- Vide Collection of Voyages to the Southern Hemisphere, in 2 vols. 8vo. published in 1788.
- This conjecture was on my return to England fully confirmed by the information I received in consequence of Captain Colnett's visit to these islands.

## CHAPTER V.

Proceed to the Southward—The Discovery springs her Main-mast—Scurvy makes its Appearance—Pass the Islands of Massafuero and Juan Fernandez—Arrive at Valparaiso—Visit St. Jago, the capital of Chili.

On taking our final leave of the North Pacific Ocean, I could not avoid feeling some regret in reflecting, that although I was convinced we had very effectually delineated its eastern shores, yet that the geography of a very large portion of that coast which gives bounds to its western limits, still remained very imperfectly, and indeed almost intirely, unknown to Europeans. The examination of these parts however had not formed an object of the present expedition; nor could we, without a complete reequipment of both vessels in some established arsenal, have undertaken a service of that nature with any reasonable prospect of success, had it been within the limits of my commission. The length of time we had now been absent from our native soil, the unpleasant intelligence we had recently received of the state of Europe, and the desire we had of adding our little strength to the means adopted for the restoration of good order and tranquillity at home, all combined to reconcile us to any disappointment which the thirst for exploring or discovering new countries might have inspired; and operated to satisfy our minds as to the necessity of making the best of our way towards those regions, where our services in another line of duty might possibly be more acceptable to our country.

Our progress however was not equal to our wishes, for by Wednesday the 11th at noon, we had only reached the latitude of 2° 3′ south, when the vertical inclination of the magnetic needle was observed to be,

Marked End,	North face	East,	0 °	40 ′
Ditto	Ditto	West,	0	30
Ditto	South face	East,	0	30
Ditto	Ditto	West,	0	20
Mean inclination	on of the north	h point,	0	30

The variation of the compass at this time was 7° 45′ eastwardly.

The wind between S. E. and E. S. E. blew a steady but very gentle breeze, and although the atmosphere was mostly free from clouds, yet the

weather was temperate and pleasant; the thermometer night and day remaining between 75 and 76. On Thursday the 12th, in the afternoon, the vertical inclination of the magnetic needle was found to be as under;

Marked End,	North face	East,	1 °	32 ′
Ditto	Ditto	West,	1	38
Ditto	South face	East,	1	40
Ditto	Ditto	West,	1	17
Mean inclination of the south point,			1	32

The variation of the compass,  $7^{\circ}$  50' eastwardly.

The same light winds with pleasant weather continued until the following day, when, after about ten hours calm, a breeze sprang up from the S. E. which gradually increased, and the next day, Friday the 13th at noon, the latitude was observed to be 4° 15′ south, longitude 265° 15′. The vertical inclination of the marine dipping needle was as follows:

Marked End,	North face	East,	5 °	37	′
Ditto	Ditto	West,	5	32	
Ditto	South face	East,	5	55	
Ditto	Ditto	West,	6	3	
Mean inclination	on of the sout	h point,	5	46	

And the variation of the compass, 9° 7′ eastwardly.

Since our departure from the Gallipagos islands we had felt the influence of a current setting to the westward, though this did not appear to be of great strength, as the error of the dead reckoning in longitude to this situation in the ocean had not increased more than a degree.

The extremely bad sailing of the Chatham had, throughout this voyage, very materially retarded the progress of our labours, but since our last departure from Monterrey the evil seemed to have much increased; and considering that our operations to the southward might acquire some advancement from our preceding her, I informed Mr. Puget, that I should make the best of my way with the Discovery towards the island of Juan Fernandez; and in the event of his not arriving there before our departure, he was provided with further instructions, which, with such as I might leave for him at that station, would be sufficient for his future government. After having made these necessary arrangements, we made all sail in the Discovery with a pleasant steady gale from the S. S. E. Many oceanic birds

and numbers of fish still attended us, and we were now and then fortunate in taking some of the latter. By the evening the Chatham was a considerable distance a-stern, and by the next forenoon, Monday the 16th, intirely out of sight from the mast-head; so that the distance we had gained of her in twenty-four hours could not be much short of five leagues.

Our progress now was not only very expeditious, but very pleasant; the wind blew a steady gale between E. S. E. and S. S. E; the sea abounded with a great variety of fish, and was remarkably smooth; the weather, alternately clear and cloudy, with some slight showers of rain, was very temperate and agreeable, the thermometer standing between 75 and 77. On Saturday in south latitude 12° 43′, longitude by

And by the dead reckoning, continued from the island of Cocos, 260° 32'.

In this situation the vertical inclination of the magnetic needle was,

Marked End,	North face	East,	23	5
Ditto	Ditto	West,	23	50
Ditto	South face	East,	23	58
Ditto	Ditto	West,	23	18
Mean inclination of the south point,			23	23

The variation of the compass, 4° 55′ eastwardly.

As we advanced the wind decreased in its force, and gradually inclined to the eastward and northward of east, with nearly the same pleasant weather. On Thursday the 26th, in latitude 19° 44′, longitude 253° 45′, the vertical inclination of the magnetic needle was found to be,

Marked End,	North face	East,	36	20 '
Ditto	Ditto	West,	36	17
Ditto	South face	East,	35	23
Ditto	Ditto	West,	35	15
Mean inclination	on of the south	h point,	35	49

Variation of the compass, 24° 5′ eastwardly.

The trade wind during the two succeeding days was light and variable in the eastern quarter, and on Sunday the 1st of March we seemed to have reached the variable winds, having a fresh breeze, attended with a very heavy swell from the north-westward. The observed latitude at noon was 23° 24′, longitude by

The variation of the compass was 4° eastwardly. In the afternoon we again reached the temperate zone; and notwithstanding that since our departure from the Gallipagos islands we had passed under a vertical sun, the height of the mercury in the thermometer had at no time exceeded 77 degrees.

The north-west wind continued with fair pleasant weather until the evening of Monday the 2d, when it veered to the north, and became light and variable between the N. N. E. and E. N. E. On Wednesday the 4th, in latitude 26° 45′, longitude by Arnold's No. 14, 258° 39′, we passed some drift wood, and we had many birds and fishes about the ship. Some good lunar observations had been lately procured by some of the officers, which shewed the longitude to be about 5′ to the westward of Arnold's No. 14, 18′ to the eastward of No. 176, and 3′ to the eastward of Kendall's chronometer; the dead reckoning at the same time shewing 264° 10′; the variation was 4° eastwardly, and the thermometer from 73 to 75.

From this time our progress was much retarded by the wind being adverse, and varying between south and E. S. E.; the weather however continued fair and pleasant until the morning of Sunday the 8th, when the breeze freshened, attended by some showers and smart squalls; in one of these, the heaviest we had experienced for a great length of time, the head of the main-mast was discovered to have been very badly sprung, about five feet below the rigging and about seven feet above, and opposite to its former defective part. The sails on the main-mast were immediately taken in, and on further examination of the wound, the head of the mast was seen to be in a very weak and shattered condition. No time was lost in relieving it of its weight, by getting every thing down upon deck that was above the top, and the carpenters were immediately employed in preparing two anchor stocks as *fishes* to support the mast-head. At noon the observed latitude was 8°, the

longitude 259° 32′; the variation of the compass 5° 3′ easterly, and the thermometer from 70° to 72°. The weather was tolerably favorable for applying such remedies to the defect in the mast as we possessed; and on Monday afternoon, the 9th, it being as well secured as was in our power, the mizen-top mast was substituted for a maintop-mast, that being as much as the weak state of the lower mast was capable of sustaining, and the maintop-gallant mast was got up for a mizen-top mast. By this unfortunate accident our quantity of canvas was so reduced, that our progress towards the appointed rendezvous was rendered very slow; we however made the best of our way, with winds very variable both in respect to force and direction, though generally attended with moderate pleasant weather.

Without the occurrence of any circumstance worthy of recital, we passed on until Saturday the 14th, when we found ourselves in latitude 33° 13′, longitude 262° 43′, and variation 4° eastwardly. At this time, to my utter astonishment and surprize, I was given to understand from Mr. Menzies that the sea scurvy had made its appearance amongst some of the crew. This was a circumstance for which it was not easy to account. The high state of health which every individual on board the ship (myself excepted) had appeared to enjoy for some months before, and the refreshments we had been constantly in the habit of procuring since our arrival at Monterrey, together with the very pleasant weather that had attended us since that period, all conspired to render the cause of this unfortunate malady the more inexplicable, especially as there had not been the smallest abatement or relaxation in the measures I had adopted at the commencement of our voyage; but on the contrary, the most rigid observance had been paid to all those circumstances, which had been proved from experience to be the happy and effectual means of preserving that most valuable of all blessings, health. All these precautions and salutary measures on this occasion seemed to have lost their effect, for the number of our scorbutic invalids increased, and with them also my solicitude, which may probably be more easy to imagine than to describe. The baneful effects which seldom fail to be consequent on this disorder at sea, filled my mind with apprehensions for the safety of our patients; and having presumed that we had at length profited so much by the experience and indefatigable labours of that renowned navigator Captain Cook, as that by due attention we could on a certainty protect seafaring people from the fatal consequences hitherto inseparable, under similar circumstances, from this malignant disorder, the disappointment which I felt on this occasion was inexpressible. This was the second instance in which it had appeared during the voyage. The first was on our passage from Nootka to the Spanish settlements in New Albion; but I was then in some measure able to account

for its appearance, our people having been for many of the preceding months exposed in a very arduous and fatiguing service to most inclement weather, with only the very small portion of refreshments we were enabled to procure during that time. These reasons did not now exist, and I remained in the greatest uncertainty concerning the cause of its origin, until at length it appeared to have been derived from a source from whence I least expected it: namely, from a disobedience of my positive injunctions and orders on the part of the cook, who had been strictly forbidden on any account whatever to allow the skimmings of the boiling salted meat to be eaten by the people. Of this disobedience, the ship's cook, a steady, grave, and valuable man, came aft on the quarter-deck, and made a voluntary confession; and stated, that he had not only acted in direct opposition to my repeated injunctions in the present instance, but also on the former occasion; though he had not been induced at any other time during the voyage, by the importunities of the people, to transgress, in giving to the crew the skimmings of the boilers to mix with their pulse, which at both those times, but particularly the present, they had been able to procure in great abundance from their Spanish friends.

On his examination it appeared that he had been less scrupulous in complying with the demands of the people, in consequence of arguments that had been frequently urged and supported by some on board, who seemed to be acquainted with the opinions of the president of the Royal Society, and who stated, that *he* conceived that pulse with any kind of grease was not only a wholesome food, but also very anti-scorbutic.

When the great insipidity of peas or beans alone, without the aid of butter, or other qualifying material, is taken into consideration, it is not much to be wondered at that a deviation from restrictive rules in those respects should have taken place, with people so totally indifferent and careless of themselves as are the generality of seamen. The very unreserved and feeling manner in which the cook acknowledged his transgression, and the contrition he shewed for having thus departed from his duty, intitled him to my full forgiveness; on which he earnestly assured me, that he would in future attend strictly to my directions, and I had reason to believe that he performed his promise. The cook's name was John Brown, which I feel a satisfaction in recording, from his having been the means of establishing a fact of so much importance to maritime persons, by the two experiments which his honesty compelled him to make known, at the risk of a punishment for disobedience of orders.

All our antiseptics were resorted to, but they did not seem to act so well as on the former occasion; and since the number of scorbutic patients

increased daily, I had reason to believe that the pernicious indulgence which had produced the disease, had been a very general practice amongst the crew.

With the wind blowing a steady gale, chiefly between N. N. E. and N. W., attended with fair and pleasant weather, we made as much progress as could well be expected in our crippled condition. In the course of the preceding week we procured several very good lunar observations for the longitude, which, when reduced by Arnold's No. 14 to Wednesday the 18th at noon, shewed their results to be as follow:

The mean o	f 31 sets	taken by	Mr. Whidbey,	273 °	25	55 "
Ditto	18	ditto	Mr. Baker,	273	36	48
Ditto	30	ditto	Mr. Swaine,	273	32	30
Ditto	37	ditto	Mr. Manby,	273	18	37
Ditto	30	ditto	Mr. Orchard,	273	17	44
The mean of the whole 136 sets collectively taken shewed what I considered the true, or nearly the						
	gitude, to be		<i>3</i>	273	25	30
By Arnold's	chronomete	r No. 14,	the longitude was	s 273	° 5	' 30 "
		176	ditto	272	7	
Kendall's,	ditto		ditto	273	7	45

From these statements it should seem, that the chronometers were at this time materially gaining on the rate now allowed. The dead reckoning shewed  $280^{\circ}$  1'. The observed latitude was  $33^{\circ}$  50' south, and the variation of the compass  $9^{\circ}$  15' eastwardly.

At day-light in the morning a strange sail had been discovered at a great distance a-stern, or rather upon our weather quarter; she was soon found to be drawing up to us, although we had all the sail set that we were able to carry; and as she appeared to be a brig, little doubt was entertained of her being the Chatham; the opinion of her being our consort was confirmed about four in the afternoon by her answering the private signal, and as she had now evidently the advantage of us in point of sailing, we did not shorten sail, but left her to overtake us; which however was not effected until about

nine o'clock on Friday forenoon the 20th, when Mr. Puget came on board, and I had the pleasure to understand from him, that, like ourselves, they had had very fine weather ever since our separation; and that on the 2d of March he had met with a large Spanish merchant ship named the Rosalie, Antonio Joseph Valaro, master, laden with cocoa and jesuit's bark from Guayaquil, and bound round cape Horn to Rio de la Plata, and from thence to Cadiz; having guitted the former place on the 20th of the preceding January. The commander of this vessel mentioned the loss of the ship Edward of London, which had been unfortunately cast away at a place called Manquiva, and that several other British vessels, which had been very successfully employed in the southern whale fishery, had visited different ports on the coast of Peru and Chili, where they had been well received; and that the English were in high estimation in those countries. From this gentleman Mr. Puget became informed, that the anchorage at Juan Fernandez was considered as very bad and greatly exposed; that a Spanish frigate had lately been lost there; and that the island afforded but very few refreshments. On these accounts he strongly recommended, that in case the Chatham stood in need of any articles of naval stores, that she should repair to the port of Valparaiso, as being the most likely place on the coast of Chili for procuring such supplies.

After Mr. Puget had obtained this information, and exchanged with Sen<sup>r</sup> Valaro some mutual, though trivial marks of civility, they parted, and each vessel pursued her course with a pleasant gale at E. N. E., which enabled the Chatham the next morning to cross the southern tropic in the longitude of 257° 40′, about a degree and a half to the eastward of our track across that line, about forty hours before them. The winds had permitted the Chatham to steer a more easterly course than we had been enabled to do, which, with our reduced rate of sailing, had contributed to form this early junction, and had obtained me a great degree of satisfaction, as it had rendered our stopping at Juan Fernandez intirely unnecessary.

The very unserviceable and damaged state of our main-mast demanded, that we should without delay repair to some port more eligible than this island was likely to prove for administering to our necessities, especially as the head of the mast, in addition to the former accident, had upon a more minute survey been found to be very rotten. A defect of so serious a nature, admitting of no delay in the application of the most effectual remedy, left no doubt in my mind respecting the measures that it would be most desirable to pursue for the accomplishment of that object.

In consequence of the strong injunctions contained in my instructions, not to visit any of the Spanish settlements on this coast, excepting in the event of the most absolute necessity, I deemed it expedient to submit to Mr. Puget, and the principal officers of the Discovery, the state and condition of the mast from the carpenters written report, together with that part of my secret instructions relative to the matter in question. These having been maturely taken into their consideration, they were unanimously of opinion, that for the good of His Majesty's service intrusted to my care and execution, and for the preservation of His Majesty's ship, it was indispensibly necessary that the Discovery should immediately repair to the nearest port, for the purpose of procuring a new main-mast; since the disabled one, with every repair that it was possible to give it, would still be very inadequate to the service that might be demanded of it in those boisterous seas, which at this season of the year we must necessarily expect to encounter in passing round cape Horn.

The port of Valparaiso seeming to be the most likely to supply our wants, and being the nearest to us, our course was directed thither with a fresh northerly breeze, and fair and pleasant weather. At noon the observed latitude was 33° 55′ south, the longitude by

Arnold's	chronometer,	No. 14,	277	0	36	,
		176,	276		31	
Kendall's	ditto		277		32	
And by the dead reckoning,			284		19	

And the variation of the compass was 10° easterly.

About four o'clock in the afternoon the island of Massafuero was seen bearing by compass E. N. E., 11 or 12 leagues distant. The wind at this time blowing a fresh breeze rather to eastward of north, our course was directed to the southward of this island; but from its distance, and the approach of night, we were unable to see much of it. At midnight we were passing within about 4 leagues of its southern side, its centre then bearing by compass N. 15 W. The latitude of the ship by the log since noon was at this time 34° 3′ south, the longitude by Arnold's No. 14, according to the last rate was 278° 56′, and by the lunar observations brought forward by No. 14, allowing the same rate, 279° 17′; but as the chronometers were evidently gaining, and that very materially, the true longitude of this island was deduced from subsequent observations, which shewed its centre to be in 279° 26′ east. Its latitude from the preceding and following days observations, which with the ship's run agreed exceedingly well together, was 33° 49′ south. This island did not appear to exceed three leagues in circuit: its surface is hilly, rugged,

and uneven, and it appeared to terminate abruptly in rocky cliffs at the water's edge. During the night we had a fresh breeze with some squalls, which continued the next morning, Sunday the 21st, when the jury maintopsail yard was carried away; not in consequence of a press of sail, but like many others of our materials, from being quite worn out and rotten. This was immediately replaced with another, of whose strength and qualities we had not a much better opinion. At about ten in the forenoon the island of Juan Fernandez was seen bearing by compass N. 60 E. The latitude was shewn by observations at noon to be 33° 56′ south, longitude by

Arnold's	No. 14,	280 °	16	' 30 "
	176,	279	18	
Kendall's,		280	15	
By the last lunar observations brought forward by No. 14,		280	37	30
And by the	dead reckoning,	286	51	

The variation of the compass at this time 13° eastwardly.

We had sensibly felt the influence of a current during the last two days, setting to the eastward at the rate of ten miles per day. In this situation the south-west point of Juan Fernandez, or rather what we supposed to be Goat island, bore by compass N. 39 E., at the distance of 18 miles. In the afternoon we passed the southern side of Juan Fernandez, at the distance of about 14 miles, which was too indistinctly seen to attempt any delineation of its shores. Its south-west point appeared by our calculations to be situated in latitude 33° 45′ south, and longitude corrected by subsequent observations, 281° 8′ 47″ east. Its aspect in this point of view was not very inviting; the point terminates in a high steep bluff, its eastern part seemed to be less elevated, and the whole composed a group of broken irregular hills, forming altogether as rude and grotesque a scene as the imagination can well fancy.

The wind seeming now to be fixed in the northern quarter, and being to the southward of our port, our course was directed to regain the parallel of its latitude; this was accomplished by Monday noon, being then by observation in latitude 32° 55′ south, true longitude 285° 30′; the wind was still at N. N. W., with fair and pleasant weather; the thermometer from 66 to 68, and the variation of the compass 13° 42′ eastwardly. Having now got to the northward of Valparaiso, our course was so ordered as to preserve that situation. This however proved to be a very unnecessary precaution, as

towards midnight, in latitude 32° 51′, the wind, after becoming light and variable, was succeeded by a fresh breeze at south, that seemed to be equally steady and fixed in its direction as the northerly wind had been before; so that we had now again to haul to the southward, in order that we might keep to windward of our port.

On Tuesday forenoon, the 24th, we gained a distant view of the lofty coast of Chili to the eastward. The observed latitude at noon was 32° 53' south. The land at this time was too far off to distinguish any of its particular parts. The wind blew fresh from the south, with which we made great progress towards the land, and by sun-set the shores were distinctly seen to extend by compass from N. 50 E. to S. 68 E., about 10 leagues distant. In this point of view the sea coast appeared to be composed of hills of various shapes and sizes considerably elevated; behind these the interior country rose to a very lofty range of stupendous mountains wrapped in perpetual snow. These were the Andes, and when first seen, which was shortly after noon, were at the distance, I should imagine, of nearly 40 leagues; but we had not an opportunity of making the necessary observations for ascertaining that fact. We continued to stand in shore until ten at night, when, concluding we were within three or four leagues of the land, we tacked and stood to the W. S. W. under as much sail as we could venture to carry, for the purpose of fetching, if possible, to windward of Valparaiso.

At two o'clock on Wednesday morning the 25th, we again stood in for the land, which was very indistinctly seen, owing to a dense haze in which it was enveloped. The wind at S. S. E. was light, and it was not until about ten in the forenoon that we were in with the shores; on which there was no one circumstance that could indicate our being in the neighbourhood of Valparaiso, nor point out whether we were to the north or south of that port, excepting our own reckoning, which shewed it to be in the former direction. I did not think it prudent in our crippled situation to risk a disappointment, and for that reason we stood off shore until an observation for the latitude could be procured; which by the help of a double altitude, was accomplished about eleven o'clock, when we bore away in latitude 33° 10' south, for a point not far distant from the place where we expected to find the bay of Valparaiso. At noon the above point, which was the most northern part of the coast in sight, and appearing like a small rocky island, lying close to a low or moderately elevated projecting point of land, and terminating at the sea side in a round hummock like a bell, bore by compass N. 43 E.; a rugged rocky islet lying close to the main land, near the south point of a small sandy bay, being the nearest shore, N. 64 E., two or three miles distant; and the southernmost part of the coast in sight, S. E. by S.

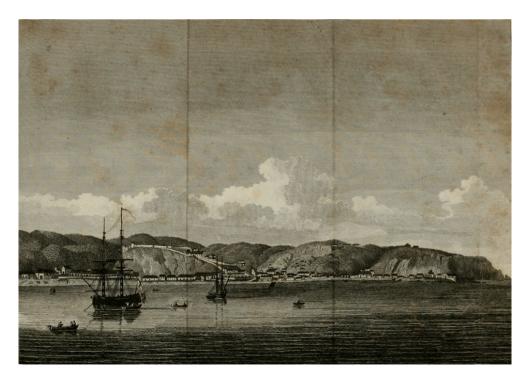
The view we had thus gained of the coasts of the kingdom of Chili presented but little to attract the attention, or excite the curiosity, of strangers. Those parts immediately on the sea shore were composed of rude cliffs and rocky precipices, against which the western swell broke with unremitting violence. Above these cliffs the country was variously broken by irregular eminences, some formed of naked barren rocks, and others consisting of a reddish substance almost equally unproductive, on which some verdure appeared here and there, with a few stunted shrubs and bushes, some of which were at great distances from each other; but nothing like a tree was to be seen, and the landscape, bounded by the frozen summits of the lofty Andes towering above the lower barren mountains that descend from them towards the sea coast, exhibited an extremely dreary, desolate, and inhospitable picture.

As we proceeded, a low steep bluff point of land, beyond that which terminated our northern view of the coast at noon, was now seen lying in a direction from it, N. 51 E. about three leagues distant, and which proved to be the western point of entrance into Valparaiso bay.

Our attention was now directed in quest of the "great rock or small island" described by Sir Richard Hawkins in 1593, as lying "a league or better to the south of, and a good mark and sure sign of, the port." At first I was at a loss to discover which of the two noticed at noon was Sir Richard's rock, as both are much further from the bay of Valparaiso than he describes them to be; but as we advanced, I had no doubt of the most northern being the "great rock or small island." This lies upwards of three leagues, in a direction S. 51 W. from the point of Angels, which is the west point of Valparaiso bay, and is rendered still more conspicuous for pointing out the port, by being situated close to a very projecting point called by the Spaniards Pr Quraumilla, from whence the shores of the main land to the southward take a direction some degrees to the eastward of south, and those to the northward, as before stated, towards Valparaiso. It is also the southwestern point of a spacious open bay bounded by a sandy beach, where anchorage might probably be found, but which must be much exposed; and as several rocks were observed lying at a very little distance from the shore, the chance is that the bottom may be composed of the same materials. On the north-east side of this bay a house and some smaller habitations near it were seen, and the country in its neighbourhood appeared to be less steril and forbidding than those parts to which we were opposite in the morning. Its surface, though unequal, was less broken; and although it could not boast of a luxuriant vegetation, yet the naked, rugged precipices, that formed a barrier against the ocean on each side of the bay, were no longer the general

characteristic of the interior country, which presented a surface of some soil, on whose withered herbage both flocks of sheep and herds of cattle were seen grazing, on the sides of the hills.

Along these shores, which seemed to be bold, we passed at the distance of from half a mile to half a league, without discovering any danger which is not sufficiently conspicuous to be avoided; and, with the assistance of a fine southerly breeze, by two in the afternoon we were abreast of the point of Angels, off which some rocks extend to the distance of about half a cable's length. These we passed at about twice that distance, without gaining soundings. In sailing round this point, the country suddenly opened upon us, and presented a scene to which we had long been intire strangers; the whole of the bay was now exhibited to our view terminated by a sandy beach; near the upper margin of which, and on the sides of the adjacent hills was seen the town of Valparaiso; and although from its situation it could not boast of much pleasantness, yet in this point of view it appeared to be neat, of considerable extent, and built with regularity; the churches rose above the other buildings, and the whole being defended by several forts, all conspired at once to announce, that we were again approaching towards the civilized world.



## *The Town of* Valparaiso *on the Coast of* Chili.

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In the bay and near to the shore rode several sail of merchant ships, engaged in their respective occupations; to and from which boats were passing and repassing to the shore, where a very lively scene was exhibited of men and cattle; the whole exhibiting that sort of commercial intercourse between distant countries, that the arts and civilization can alone carry into effect. This pleasing prospect of at length drawing towards our native country, after so long an absence amongst the rude, yet hospitable, nations of the earth, was however not unmixed with forebodings of a painful nature, lest the intelligence respecting the distracted state of Europe, which we had but too much reason to apprehend would meet us on visiting these shores, should be of a more melancholy complexion than we had anticipated.

The wind from the southward blowing directly out of the bay, obliged us to make some trips for the purpose of reaching a proper situation for anchoring, which was accomplished about three o'clock in 10 fathoms water, muddy bottom.

An officer was immediately dispatched to inform the governor of our arrival, of the occasion of our visit, and of the assistance we required. A ship that had been seen in the offing in the morning anchored soon after us, and, together with the Discovery and Chatham, made ten sail of vessels riding in the bay; of these five ships and two brigs were Spanish merchantmen, and the other the Lightning of Bristol, a South-sea whaler, commanded by a Mr. Cook; from whom we received little encouragement to hope for such a reception at Valparaiso, as we considered we had a right to expect, or as our situation demanded. Soon after we had anchored, however, and during the absence of Mr. Manby, who was the officer sent to the governor, a Spanish officer came on board with congratulations on our arrival from Sen<sup>r</sup> Don Lewis Alava, a colonel in the army, governor of this port, and brother to our friend of that name at Monterrey.

This message was accompanied by the strongest assurances on the part of the governor of affording us every assistance that we might require, and which might be in his power to bestow, and with hopes that he should soon have the pleasure of seeing myself and officers on shore, where we might depend upon receiving every civility; adding, that the time we might remain at Valparaiso should pass as agreeably as it was in the power of himself and the inhabitants of the town to render it.

It was not easy to reconcile two reports so very opposite, though I did not hesitate to give more credit to the latter than to the former, especially as our first impressions were received from one not perfectly sober. Had I entertained any doubts, my suspense would not have been of long duration, for on the return of Mr. Manby, every thing the Spanish officer had stated was confirmed; and we now understood, that if those on board the Lightning laboured under any uncomfortable restrictions imposed by the governor, it was to be attributed solely to their own indiscretion and improper conduct, which had rendered such measures on the part of the commanding officer indispensibly necessary for the preservation of good order.

Mr. Manby informed me that Sen<sup>r</sup> Alava had stated to him, that notwithstanding he did not entertain the least doubt that Don Ambrosio Higgins de Vallenar, the President and Captain-General of the kingdom of Chili, would confirm all the promises which he then made; yet it was necessary, before any material operations should take place, to obtain his excellency's sanction and approbation for their being carried into effect. For this purpose he should dispatch a courier that evening to the capital, St. Jago de Chili, the residence of the President, and where he now was, and he hoped it would be convenient to me to make some communication to his excellency by the same conveyance, on the subject of our visit, and the succours we required.

With this request of the governor's I instantly complied; the messenger was then dispatched, and we were given to understand that a reply might be expected on the Saturday or Sunday following; in the mean time there was no restraint on the officers visiting the town; the markets were open to us to obtain such immediate refreshments as we might require; and we were equally at liberty to recruit our stock of water and of fuel.

On these agreeable communications being made, the garrison was saluted with thirteen guns, and on this compliment being equally returned, I waited upon the governor, whilst the vessels were mooring by the bower anchors in a N. N. E. and S. S. W. direction, a cable each way; the southern anchor in ten fathoms, the northern in sixteen fathoms water, on a bottom of stiff muddy clay. The point of Angels bearing by compass N. 35 W. distant about a mile; the saluting fort on the western side of the bay, N. 53 W. about half that distance; the governor's house in another fort, S. 86 W. about three cables distant; a rocky point running off from the town, being the nearest

shore, S. 7 W. one cable and a half distant; a redoubt on a hill, S. 5 E.; a conspicuous white church in the village of Almandrel, S. 65 E.; the easternmost fort, N. 83 E.; a remarkably lofty, rugged, snowy mountain, terminating partly in a flat, and partly in a peaked summit, being a part of the Andes, N. 61 E.; the east point of the bay, N. 57 E. about a league distant; a more distant point, N. 17 E. three leagues off; and the northernmost part of the coast in sight, N. 6 W.

On Thursday morning the 26th, accompanied by Mr. Puget and several of the officers of both vessels, I paid my formal visit to governor Alava, and had the pleasure of receiving every mark of polite and hospitable attention from him, with repeated assurances that nothing should be wanting on his part to relieve our wants, or to render Valparaiso as pleasant and agreeable to us as its circumstances would allow. These ceremonies being concluded we returned to the vessels, where our visit was shortly repaid by the governor, attended by most of the principal officers and inhabitants of the town; and on their coming on board they were saluted with thirteen guns. From all these gentlemen we received the most pressing intreaties to visit their families; which civilities we did not fail to accept, expressing our thanks for the cordiality with which they had been so obligingly made.

The day was pleasantly spent amongst our new acquaintance, who readily assisted me in making arrangements for procuring a supply of the abundant refreshments which this luxuriant country afforded. In doing this, my first care and principal object was, immediately to adopt the most efficacious measures that could be devised, for eradicating the inveterate scorbutic disorder which now prevailed, and which had greatly increased amongst the crews of both vessels. The number of scorbutic patients rendered incapable of attending to their duty on board the Discovery, amounted to seventeen. On board the Chatham their number was not so great, though the disease was making a rapid progress; and I learned from Mr. Puget, that on his making inquiry into the cause of it, he had found that the same pernicious practice had been indulged in on board the Chatham, which had taken place on board the Discovery during our late long and tedious passage, that of permitting the fat skimmings of the boiling salt meat to be eaten by the people with their pulse, and to be used for frying their fish; but it did not appear that this unwholesome indulgence had been carried to such an extent on board the Chatham, as it had been on board the Discovery. In consequence of this information, I deemed it expedient that the whole crews of both vessels should, in addition to the regular allowance of fresh beef and greens, and new soft bread from the shore, be daily served with a quantity of grapes, apples, and onions; and I had soon the happiness of finding, that this salutary diet was attended with the desired effect of intirely eradicating the disease.

Whilst we were waiting for the return of the courier dispatched to his excellency the President, my time was not unprofitably employed; for I embraced that opportunity to visit the several warehouses, and by so doing obtained a complete knowledge of the quality of the stores and provisions they were capable of affording us. When this was done, I made the necessary arrangements for receiving them on board the instant we should be at liberty to accept them. In the course of my inquiries I had the mortification to learn, that there was not a spar, either at Valparaiso, or in the country within our reach, of a size sufficient to be converted into a mast, for the purpose of replacing our disabled one on board the Discovery. This was a matter of very serious concern; but as a new mast could not here be procured, the only expedient we had the power of resorting to, was to use our best endeavours to repair the old one. This I purposed to do by turning the mast end for end, by which means the most defective parts would fall below the deck; where, by the addition of the fishes we had on board by way of further security, I was in hopes, that with great care and attention to the performance of the work, we should be able to render it sufficiently strong to answer the purpose of carrying the vessel to England.

The town of Valparaiso not affording any taverns or places for the reception and accommodation of strangers, we were obliged to intrude on the hospitality of its worthy inhabitants for such conveniences when we visited the shore. These civilities were conferred in so handsome a manner as at once to relieve us from any idea of our being intruders; the pleasure that every one manifested in entertaining us, completely removed every sentiment excepting that of gratitude on our parts, for the repeated acts of kindness they so very obligingly bestowed. Amongst the first to whom we were indebted in these respects was Don Juan Barrara, the collector of the king's duties, and Don Praeta, the captain of the port. We first became known to these gentlemen in their public capacity, and they had the goodness to introduce us to many others of their friends, all of whom treated us with the greatest politeness, attention, and hospitality; but as their houses were not more than sufficiently large for the accommodation of their own respective families, a lodging on shore was not to be easily procured. The very indifferent state of my health at this time however, required that I should avail myself of this opportunity of sleeping on shore, and taking as much of the exercise of the country as my strength would permit; for this reason I was induced to apply to the governor, to allot apartments for myself and a few of the officers in some of the public buildings of the town, with

which he very obligingly complied; and in the event of our equipment in this port meeting with the approbation of his Excellency the President of Chili, of which there was little doubt, the Casa de Exercicios was appointed for our reception and residence. This building had been erected some years ago as a chapel of ease, for the purpose of accommodating the country inhabitants who came into the town on Sundays to attend divine service, but who frequently could not find room in the churches; and it had likewise been appropriated for the penitential acknowledgments of the women.

Our time on board was busily employed in making every thing ready to proceed in the service we had to perform, the instant we should receive the sanction of the president for so doing. On Saturday evening the 28th, agreeably to our calculations, the courier returned, and I had the satisfaction to receive from his Excellency Sen<sup>r</sup> Don Ambrosio Higgins de Vallenar, President and Captain-General of the kingdom of Chili, the most ample confirmation of all the liberal offers which had been made to us by Governor Alava; together with a letter containing the most polite congratulations on our having thus far safely accomplished the great object of our expedition, and having at length arrived in a country where nothing should be wanting within the reach of his power to supply, that could in any way contribute to the restoration of our health, administer to our future comforts, or tend to reequip the vessels, and repair the damages which they had sustained. These obliging and friendly offers were further accompanied by a communication to governor Alava, stating, that if myself and some of the principal officers should be inclined to visit the capital, we had his Excellency's permission to do so; and in the event of our undertaking a journey to St. Jago, the governor was requested by the President to employ his good offices, in seeing that we were properly provided for the excursion.

I embraced the earliest opportunity to return my most grateful acknowledgments to the President, for his extreme politeness and liberality towards us; and I lost no time in setting hard to work on the various services which now demanded our attention. My first and principal object was to get out the main-mast; for this purpose, on Monday morning the 30th, the ship was moved nearer in shore, and moored in four fathoms, to insure more effectually smooth water for performing that operation. After this was accomplished, on the following morning, the mast was hauled up on to the beach between Valparaiso and the village of Almandrel, where a tent was erected, and at the governor's express desire a guard of marines from the Discovery was posted there, to prevent thefts, or other improper conduct on the part of the inhabitants, as some of the pinnace's covering had been stolen the preceding night.

Whether this application from the governor proceeded from a sentiment of delicacy towards us, or whether he considered that our marines would be more adequate to the protection of our property than the Spanish soldiers, is not easy to decide; but it appeared to be a very unprecedented and extraordinary circumstance, that a guard should here be requested by the governor from an English man of war, to do duty in the dominions of his Catholic Majesty. The marines however were landed with a sergeant, and planted as centinels, with positive orders from me, on no account to hurt any of the inhabitants, even though they should be detected in the very act of thieving; but to secure their persons, that they might be dealt with according to their own laws.

On the mast being examined we had the mortification to find, that the damage it had sustained was greater than we had suspected, as it was sprung nearly two thirds through, a little below the hounds. Some Spanish carpenters, in addition to our own, were immediately set to work upon it; and as both the vessels required much caulking, the artificers of the country were also hired for this service. Our sailmakers were employed in repairing the old and making some new sails; the coopers in setting up casks for the reception of flour, and repairing those made use of for water; and the armourer was making the necessary iron work for the repair and security of the main-mast and other purposes, whilst those remaining on board were variously employed about the rigging, and in the hold for the reception of a quantity of shingle ballast. Not being yet positively determined whether our route home should be round cape Horn, or through the straits of Magellan, and our cables and hawsers being worn to the last extremity, a supply of each sort was ordered to be made for both vessels, according to the dimensions we required; for although we had found an abundance of small white cordage in the warehouses, there were no cables; there being little demand at Valparaiso for such stores; nor was there any tarred rope of any description, the cordage from four inches in circumference downwards, being all white rope, such as the Spanish trading vessels in these seas use for running rigging. These several services were all put into a regular train of execution; but as the following day was the anniversary of our departure from Falmouth, and the commencement of the fifth year of our labours, all work was suspended, and the people as usual had the day to themselves. They were all served with a double allowance of grog, and an excellent dinner, composed of the various good things that this country so abundantly afforded.

All our operations were cheerfully resumed the next morning, Wednesday, April the 1st; and on my visiting the April 1795

artificers employed on the mast, I had the mortification to understand, that on framing the heel of the mast for the purpose of its becoming the head, that end, near to the place where the cheeks were to be fixed on to it, was found to be extremely decayed, and scarcely in a better state than the other extremity. It was however, though rotten, not sprung, and having no resource but that of applying the best remedy in our possession, two stout *cheeks* made of our spare anchor stocks, together with two strong *fishes*, were fixed to the mast below the partners of the main deck, and continued up to its head; and even with these additional securities, it would be but a crippled stick to depend upon: yet as we had no alternative, we were compelled to make the best shift we could, which would necessarily oblige us to be particularly cautious, and to press it as little as possible in our passage homewards.

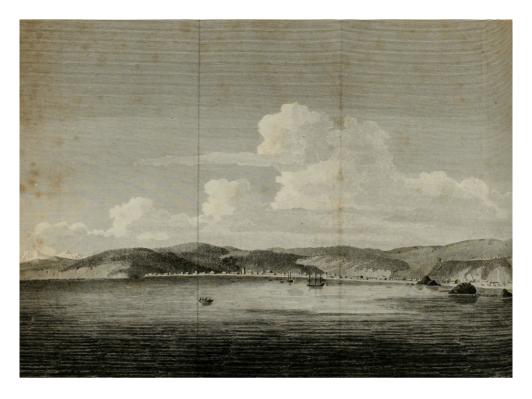
The observatory, with the requisite instruments, was sent on shore, and, as usual, committed to the charge of Mr. Whidbey, for the purpose of making such observations as were now become necessary for ascertaining the rates and errors of the chronometers, and for finding the latitude and longitude of Valparaiso. Having made this and some other arrangements for carrying into effect the re-equipment of the vessels, I determined to avail myself of the obliging permission of the president to visit the capital of Chili, and ordered preparations to be made for an excursion to St. Jago.

Our party was to consist of Mr. Puget and Lieutenant Johnstone of the Chatham, and Lieutenants Baker and Swaine, and Mr. Menzies of the Discovery. I had already made known to governor Alava my intention of visiting St. Jago, who very obligingly gave directions, as Valparaiso did not afford any travelling carriages, that we should be provided with a proper number of horses and mules for the expedition; the former for our riding, and the latter for carrying our luggage.

I now had the pleasure of finding that his Excellency the President, together with his polite invitation to the capital, had also sent two dragoons from St. Jago, who were natives of Ireland, in his Catholic Majesty's service, for the purpose of being our guides and interpreters, and for rendering us every other service that we might require on the journey. These people had been long in New Spain; they seemed to be highly delighted with the charge now intrusted to their care, and not a little proud of the power and consequence that was attached to it; for, as on this occasion they bore the immediate order of the Captain-General, they had authority to do many acts from which, in the capacity of dragoons only, they were prohibited. This power, amongst other things, permitted them to take any horse or horses

whatsoever, whether in the stables or at pasture, for the purpose of facilitating the service on which they were employed; but as our visit to St. Jago was purely for recreation, I would not permit any compulsory measures to be resorted to for our accommodation; and a sufficient number of horses were procured, at twelve dollars each, for the journey thither, and back again to Valparaiso.

Every thing being prepared, we set out early on Friday morning the 3d, with a numerous cavalcade; for, notwithstanding this country had been settled a great length of time, we were given to understand that we should find no accommodation on the road between these two principal towns of the kingdom of Chili, excepting such as might be met with in the villages through which we might pass or occasionally stop at, and these would consist only of a shed or uninhabited empty house. A supply of provisions might be depended upon, but there were neither beds, seats, tables, nor any sort of convenient or necessary articles or utensils to prepare them for our table; all these, with our cook, we were obliged to take with us; and, lest we should be disappointed of the promised shelter, we were provided with a tent, which was packed in convenient travelling trunks, and carried on the backs of the mules, according to the usual method of travelling in this country. I could not, however, help expressing my concern that the poor beasts should be so much loaded, and I objected to the weight proposed to be carried, especially the poles of the tent, which I suspected would prove too inconvenient a burthen for them to move under: indeed this circumstance produced some altercation between the muleteers and the dragoons; but as there was no appeal against the injunctions of the latter, the muleteers and myself were obliged to acquiesce, and twelve mules were completely loaded with our tent and baggage. The horses that had been hired we thought rather too small, and not of sufficient strength; for, besides the weight of their rider, they had each a most enormous heavy saddle to carry; but our Irish guides undertook to answer for their abilities, and the event proved that their judgment was to be depended upon.



W. Alexander del: from a Sketch taken on the Spot by J. Sykes

J. Heath Sculp.

## The Village of Almandrel in the Bay of Valparaiso with a distant View of the Andes.

From the town of Valparaiso, which is situated on a narrow tract of very uneven ground at the foot of the steep rocky precipices, which, at no great distance from the water side, compose the shores, there is no pass immediately into the country but for foot passengers; for the main road which leads into the interior parts of the country, approaches the sea shore through the village of Almandrel, whither our route was necessarily directed. This village is pleasantly situated, and is on a more extensive border of low land than the town of Valparaiso; but it is bounded in a similar way behind, by steep and nearly barren hills. The vallies and plains, however, in its immediate neighbourhood, are fertile, and large gardens were both cultivated for profit, and decorated for amusement. From Almandrel a tolerably good, though rather steep, road had been made, in a zigzag way, over a ridge of hills, of considerable extent and elevation, the summit of which occupied us full two hours in reaching. The old road between these

two towns being a very bad one, and dangerous to pass, his excellency had determined that a new and more eligible line of road should be made; and for the more immediate convenience of the inhabitants of St. Jago and Valparaiso, this new road, which is about sixteen yards wide, had been begun from each place, and by that means an easier and more pleasant communication with the adjacent country had already been afforded to the inhabitants of each of these towns than they had hitherto enjoyed. We were informed by our guides, that the whole of the new road was not yet finished, but was at that time in a progressive state towards completion, and that we should meet the people employed upon it as we proceeded.

Under the present circumstances of this road, and whilst the dry season may continue, it is doubtless as commodious a pass as could have been well designed; but, from the looseness of the soil, and the acclivity of the hills along the sides of which it is carried, it appeared to us that it would be liable to great injury in the winter season; which, we were told, is frequently subject to extremely heavy rains, that must necessarily rush with great impetuosity down the sides of this steep mountainous country.

Having gained the top of the road, which passes over a depressed part of that ridge of lofty hills which bind the sea coast, we arrived in a spacious plain, nearly on a level with the summit of the hills we had now left behind us. This plain extended to a considerable distance, in a north-easterly, easterly, and south-east direction, where it finished at the base of another ridge of hills, beyond which were seen other ranges variously diversified, and rising in succession one after another; until our view was terminated by the hoary head of the lofty Andes, wrapped in undissolving snow. Had the intervening plain, and the surrounding rising hills, exhibited the verdant productions of nature, assisted by the hand of man, the landscape would have been beautiful in the extreme, but this was not the case; and the apparent sterility of the wide waste, that now encompassed us on every side, rendered that abundant supply of good things which we had been daily accustomed to see in the market of Valparaiso, a circumstance not easily to be accounted for.

Instead of numerous villages, fertile pastures, and fields in high cultivation, which I had expected to find, after passing over the hills near the sea shore, an extensive open desert now appeared before us, destitute of wood, and nearly so of verdure; as a few stunted trees only, and some grovelling shrubs, were scattered at a great distance from each other; and, excepting near the banks of the sluggish rills of water that crept through the plain, vegetation was scarcely perceptible; whilst the few miserable

inhabitants that existed on its surface, lived in wretched little hovels, or huts, made principally of mud. The frames of these dwellings, of which we had seen about a dozen, were rudely constructed of wood, and plastered over with a thick coating of mud; this served as a wall, whilst the unsmoothed surface of the ground formed the floor, and little or no covering appeared on the roof; the whole seeming scarcely to afford a shade against the scorching rays of the sun; for against wind and rain these humble mansions could afford no shelter.

At one of these mean abodes, about fifteen miles from Valparaiso, we stopped to dine. The inside of the dwelling more forcibly displayed the poverty of its inhabitants than had been exhibited by its external appearance; for it hardly contained the most common necessaries to the existence of human life; a dirty table, a stool, a wretched bed in one corner, and five or six crosses, comprehended all its furniture; yet it was not without some decorations of a religious nature; and what still more attracted our notice, those who resided in it not only indulged in the luxury of taking the *mattee*, which is an infusion of an herb imported from Paraguay, but to our surprize, the very few utensils they possessed for their most common domestic purposes were chiefly made of silver. The land about these miserable hovels was, like the wide surrounding waste, in a perfect state of nature, without the vestige of any labour having been ever bestowed upon it, not even in the cultivation of a garden. The few wretched people who inhabit this dreary wild, seemed to rely intirely on the bountiful hand of Providence for their daily subsistence; and to pass away their lives, without entertaining a wish to procure the least addition to their happiness or comfort, at the expence of any exertion. Indolence and superstition appeared to influence the whole of their conduct, which was marked with a greater degree of uncleanliness and those characteristics that distinguish the very lowest order of society, than I had before witnessed amongst any people who had ever had the advantage of living amongst those connected with the civilized world.

The mules which carried our luggage were on the road before us, making the best of their way to the place where we purposed to rest for the night, excepting one sumpter mule, which had accompanied us with some articles of provisions and provender for the day; and by adding to our own stores the supplies which these hovels were able to furnish, consisting of poultry, eggs, potatoes, onions, and fruit, made an excellent repast, whilst our horses were also refreshed, and prepared to proceed with us over this extensive desert. Having now travelled some miles beyond the extent to which the new road from Valparaiso had been carried, we found the old one infinitely less commodious, and the difference between the two was very

great indeed. Instead of the smooth regular surface over which we had passed from Valparaiso along the new road, this could only be considered as a beaten track, sometimes leading along, or through, deep and irregular ravines and gullies, destitute of the appearance of any labour having ever been applied to reduce the inequalities of its surface, or to remove any of those impediments which continually interrupted our travelling.

The making of the new road had doubtless been a work of great labour; and to a people who are not very industriously inclined, and who are all bigotted to former practices and original habits, it is no wonder that the manifest advantages that must result to the inhabitants of the country from his Excellency's wise undertaking, should be overlooked, or rather not seen by them; and that the execution of his judicious plan should have deprived him, amongst the lower orders of the people, of much of his popularity. For as the thought had first originated with the President, rather than not indulge a contradictory spirit, which our guides informed us had shewn itself amongst the bulk of the people, the inhabitants seemed to be more willing to sacrifice their own future interest and comfort by opposing this beneficial design, than to do any thing which might promote its success.

Little variation occurred, in the scenery already described, in our journey in the afternoon, as we saw few objects to attract our attention until towards the evening, when we arrived at the village of Casa Blanco, or, the *white house*. Here our guides proposed we should rest for the night, and after travelling twenty-eight miles in a way to which we were little accustomed, we all gladly agreed to the measure.

Casa Blanco is a hamlet, consisting of a neat church and about forty houses in its neighbourhood; which, with some inclosures of land under cultivation, formed a pleasing contrast to the barren naked country through which our day's journey had been directed. The principal person of the village appeared to be the curate, who having been made acquainted with our approach, was prepared to meet us, and gave us a like hospitable reception with that which had been so generally shewn by all the good people of this country with whom we had hitherto met. In the exercise of his humanity and good wishes, our reverend friend seemed to be much hurt that he had so little to bestow; but as we fortunately did not stand much in need of his assistance, excepting in one respect, that of providing us with a lodging, we soon relieved him from his embarrassment. This gentleman immediately furnished us with a house, over which he held some authority; a mansion precisely of the description which, we had been given to understand, we should find on the road for our accommodation.

This house, if the structure could be intitled to such a name, was situated nearly in the centre of the village, and was so rudely formed, that it could hardly be considered as the work of a civilized people. Its walls were made of dried pieces of earth cut square into the shape of bricks, which had been laid on each other when in a wet state, and plastered over with the same substance; but by drying unequally the plaster had fallen off in many places. Its inside was open like a barn, and consisted of but one apartment, which contained nothing but our baggage, that had arrived some hours before us; and had the weather been rainy, it would have afforded us but very imperfect shelter. The floor was no other than the ground in its natural, unlevelled state; but though it was not remarkable for its cleanliness, it was spacious, and in that respect more suitable to the purposes of our party, than the tent we had brought with us. As it, however, was totally destitute of all kinds of furniture, we were obliged to resort to our neighbours for such temporary conveniences as we should want, which they very readily supplied: and whilst our supper was preparing we visited the inhabitants in the village, by whom we were received with the most cheerful affability; particularly by the younger parts of the sex, amongst whom we noticed several faces which, even by the side of our fair countrywomen, might have been considered as pretty, had not the intolerable nasty custom of painting both red and white, destroyed the natural delicacy of their complexion, and impaired the effect of the agreeable assemblage of their features. Their assiduity to please was however very engaging, and the evening passed so pleasantly, that the fatigue of the day's journey was, I believe, intirely forgotten by most of us. The houses of this village being all white-washed, gave it a neat appearance, which, as we approached, impressed us with a belief that we should find these dwellings infinitely superior to the wretched hovels we had passed in the course of the day; but we had the mortification to discover, on accepting the invitations of the principal people, that the same want of cleanliness prevailed, and that wretchedness, indolence, and superstition was exhibited here in as great a degree, as amongst the cottagers on the sun-parched desert. The only difference that we could discern, between those people and the inhabitants of Casa Blanco, consisted in the superiority of the external habiliments of the latter, who had evidently dressed themselves in their best attire for the occasion.

Our time was agreeably engaged until supper was served, when we were favored with the company of every inhabitant, I believe, belonging to the village; the principal persons partook of our repast, whilst the others seemed to be equally gratified in the opportunity that was afforded them, of satisfying their curiosity with a scene so novel and unexpected in their country. The glass went cheerfully round, and our new friends did not retire until a late hour. Our blankets were then spread, but the night did not pass so pleasantly as the evening had promised; for our rest was most tormentingly disturbed by the vermin, which had been generated by the former filth of our habitation, and which now took revenge upon us strangers, for having endeavoured to dispossess them of their strong holds by sweeping out the place. When we arose in the morning we found ourselves but little refreshed, owing to the great annoyance we had suffered from myriads of bugs and fleas. Early the next morning we again set out, and soon arrived at the foot of that range of hills that gives bounds to the plain on which Casa Blanco is situated. These hills appeared to rise with a quicker ascent, and to a greater height above the plain we were then quitting, than the first ridge had seemingly done from the sea side at Almandrel. The new road here led across the less elevated part of the ridge, notwithstanding which, it was so steep that it was necessary to cut the road in the same zigzag diagonal way as before, and in its course from the base to the summit of the hills, it made twenty-five returns or angles.

On this intermediate part of the new road the labourers were at work; and we understood from our guides, that as a sufficient number of people could not be procured to carry the whole of the design into execution at once, his Excellency the President (having the comfort, convenience, and interest of the inhabitants much at heart) had, in order to facilitate the intercourse between these two great towns, ordered the most difficult and dangerous parts of the new line of road to be first made passable and commodious. The road here was of the same width, and equally well made, with the part before described; but as the soil consisted of the same loose sandy materials, it must necessarily be liable in the winter season to the same disadvantage I have before stated, from the descending torrents of rain.

We had here for the first time an opportunity of seeing the peasantry of the country in a labouring capacity, and we could not help remarking, that their inactivity in the performance of their work could only be equalled by the humble means they possessed for carrying it into execution. There were about fifty men at work with common pick-axes and shovels; and to supply the place of wheel-barrows for the removal of the earth from the higher to the lower side of the road, the hide of an ox was spread on the ground, and when as much earth was thrown upon it as would require the strength of two men to remove, the corners of the hide were drawn together by each of them, and in that state dragged to the depressed side of the road, and emptied where requisite, to preserve a gentle slope in the breadth; or else discharged over the brink, and sent down the side of the hill. The rocky

parts, which were frequently met with, were blown up with gunpowder; and the fragments, which sometimes were very large, instead of being beaten into small pieces for the purpose of making a more solid foundation for the passing of carriages, were all moved to the lower side of the road, and, like the earth, thrown from thence down the hill. By this injudicious practice the earth from the higher side which in most places might have been contrived to have made a parapet along the brink, was not only carried down by these massy fabricks of rock, but in many places the ground was torn up by them in their passage down; and as it appeared to us that the brink was to be left in this open ragged state, the descending rains must soon cause gullies that will injure the road, and do it considerable damage. The superintendents, however, seemed to have been aware that the torrents of water, descending from the upper side of the hill above where the line of road passes, might have the effect in rainy weather of washing away the loose materials of which the road is composed; for a channel was cut along the side of the road nearest the mountain to receive such water, and to carry it down its inclined plane; but it appeared to us to be too small, and too much like a gutter to answer the purpose for which it was intended. The lower side, or brink, had neither bank of earth, nor rail of wood, as a fence; nor did we understand that any sort of protection was designed to be made, the want of which gave it a very unfinished naked appearance, and in some places, where the lower side passed over a steep part of the hill, or over perpendicular precipices formed by the rock, it appeared to be dangerous in a high degree; for in the night, or in the event of a horse taking fright, or falling near this outer unprotected side, there can be little chance of the animal or its rider escaping unhurt. Indeed it did not appear to us to be prudent to venture too near to this side in the day time, as the road had already crumbled down the hill, and had fallen into deep holes in many places.

The labourers, I was informed, received their provisions, and a rial and an half per day, which according to the rate at which we received the dollar, (viz.) at three shillings and nine-pence each, makes the amount of their daily wages about seven-pence sterling, and the value of their food cannot exceed a groat. These circumstances made it appear to us very extraordinary, that in a country where the expence of labour did not exceed eleven pence per day, more persons were not employed in agriculture, and other rural improvements; especially as the soil and climate seemed to be well adapted for cultivation, and the situation of the country insured a ready market for every kind of produce; of which, there could be no doubt, an abundance would easily be procured, to reward the labours of industry. By the introduction of a greater proportion of the common necessaries of life, and

by the obtaining a few of its comforts, it is reasonable to suppose that a general spirit for exertion would be diffused amongst the lower orders of the people, who might be taught, by encouragement, to prefer a life of diligence and activity to that supineness which at present disgraces the larger part of the community. The submissive obedience that is here paid to every regulation or restraint imposed by the priests, gave us reason to believe that it might be within their power to insist that each individual should employ himself, or be employed by others, a certain number of hours each day, either in his own garden, or in the general husbandry of the country; for which certain rewards, proportionate to the exertion, should be assigned as an incentive to a life of industry. This would soon produce an inclination for employment, which would not only promote the general happiness of the people, but would be the means of securing to every one, in proportion to his diligence, the comforts that would certainly arise from this change in the present economy of their lives. Instead of the universal apathy to work that seemed to pervade the whole of the labouring class, who were dragged to their employment, without any self-impulse, like an ox to the voke, their daily labour would be undertaken with alacrity; and, in looking forward to the advantages that would result from their exertion, they might soon be stimulated to prefer the habits of industry to those of supineness and indolence

On reaching the top of this range of hills, we could plainly discern the neat looking village of Casa Blanco, which added greatly to the appearance of the country we had left behind. The road forward to St. Jago descends on the north-east side of these hills, but it had not so many angles or returns in it as that by which we had ascended on the other side, because the intermediate valley, between this range of hills and the mountains before us which we had yet to pass, was considerably more elevated from the level of the sea, than the plain on which Casa Blanco is situated.

After breakfast, we proceeded on our journey along a very narrow path, which, without a guide, might have been easily mistaken, as there were many similar to it, in various directions, through a forest of small trees, that continued for about four miles. About four in the afternoon we stopped at a mud hovel, at the distance of nearly five miles from the mountain of Praow. The country we had passed through possessed little to entertain, and less to interest, the traveller; its general character was similar to that over which we had passed before, excepting that it was more wooded, without any objects to vary the scene; and being much fatigued with our new mode of conveyance, and the heat of the weather, the advice of the dragoons to make this spot our resting place for the night, was willingly acceded to by all

parties. Some lamb and poultry were soon procured for dinner, which was dressed by our cook, and both proved to be very good. Our table was spread under the shade of some vines close to the hovel, where we were attended by a few peasants brought thither by curiosity, who conducted themselves very respectfully. We retired very early to our blankets, which, as before, were spread in the hovel on the bare ground.

By the recommendation of our guides, we were on horseback at three the next morning, that we might avoid the intense heat to which, they stated, we should be exposed in ascending the lofty summits of Praow; we accomplished this before sun-rise by the new road, which made thirty-two passes or returns on its side, cut out in a manner similar to the other parts of it over which we had already travelled. In ascending at this early hour, we found the air so very cool, that great coats or warmer clothing would have been very acceptable; and we all were of opinion, that the consideration which had tempted our guides to recommend our travelling thus early, was more to insure a resting place the next evening amongst some of their particular friends, than to avoid the heat; a measure on which, however, much of our comforts might very possibly depend.

From the top of Praow the landscape was very interesting. To the eastward stretched the extensive valley in which St. Jago is situated, and which was terminated by the lofty stupendous Andes, whose summits exhibit perpetual winter. In the opposite direction the view of the country was not less worthy of our attention; a great number of mud hovels were now discerned, that had before escaped our notice as we had travelled along, and we now understood that the valley through which we had just passed was considerably more inhabited, especially near Praow, than those parts of the country nearer to Valparaiso. The people are chiefly peasantry, whose principal employment is to take care of some oxen and sheep that feed in the vicinity of their several huts.

We descended Praow to the north-east, by fewer passes than we had ascended on its opposite side, as the valley in which St. Jago is built is much higher than the other two across which we had travelled; the general character of the country being that of an inclined plane rising towards St. Jago, although its surface is broken by the ridges of mountains before described. The road still continued in an eastern direction, and was here as well made and as broad as the turnpike roads in England. On either side were several small orchards, and a few plantations with some indifferent pasture land, on which cattle were seen grazing under the shade of a few scattered trees; but the general want of cultivation gave the face of the

country a barren and wild appearance, destitute of any feature that could indicate our approaching so large and populous a city as that of St. Jago; the only people we saw were two or three travellers, and a few muleteers.

We stopped to breakfast about fifteen miles from the capital, whose lofty spires were now plainly discerned, towering above the numerous houses which the city appeared to contain. Notwithstanding our present vicinity to so large a town, we found no other place for the accommodation of travellers than the mud hovel, where we were entertained in the same way as we had been before; and where, like the others at which we had stopped, there was no sign of any improvement whatever, either in the building, or in any other respect that might add to the comfort of life; the same want of cleanliness, and wretched condition which I have before had occasion to remark, continued here to debase the character of the inhabitants, who, notwithstanding their external appearance of wretchedness and misery, wore nevertheless a contented look, and together with a cheerful countenance possessed a disposition to oblige that was extremely grateful to our feelings, though their excessive indolence and inactivity created in us a mixed sentiment of pity and reproach. In addition to the usual supplies we had found on our journey, we here procured some excellent water melons of luxuriant growth and in high perfection, which were very refreshing and acceptable.

Having finished our breakfast we again resumed our journey; the road was level, broad, and firm, and we had not travelled far, before on each side of it were seen plantations and vineyards, in each of which a neat white house was generally situated at a little distance from the road. The appearance of cultivation and fertility in these low lands, when contrasted with the stupendous summits of the Andes, produced a most agreeable effect, and rendered this part of our journey very pleasant and entertaining. After a smart ride of nearly two hours, we arrived at a house about a mile from the capital, where fatigue, and a journey of ninety miles, made it necessary that we should halt; not only for the purpose of taking some rest and refreshment, but also that we might equip ourselves for the visit of ceremony we were about to make to the Captain-General. From hence I dispatched one of the dragoons who had attended us with a letter to his Excellency, announcing our arrival in the vicinity of the capital, and stating, that with his permission we would do ourselves the honour of paying our respects to him at the palace in the evening; and I gave further directions to the dragoon, to procure and send from St. Jago, carriages sufficient to convey thither the whole party. In the mean time our dinner was provided and served, and it was our intention as soon as that should be over to dress ourselves in all our best apparel, that we might make as uniform an appearance on this occasion as our several stocks of clothing would enable us to do; for the extreme length of the voyage had deprived most of the party of the principal parts of their wardrobe, and we had scarcely a coat or hat that was fit for common use, much less for an occasion like this. In the midst of our endeavours to make as smart an appearance as we could contrive, the dragoon returned, accompanied by an officer from the Captain-General, whom he sent for the purpose of complimenting us and congratulating us on our arrival, and of desiring that we would immediately repair to the palace, on horses which he had sent for the purpose of conveying us in a suitable manner to the capital.

Although it was by no means my intention to have made so public an entry as this arrangement of the President's would necessarily expose us to, yet it appeared to me that we could not decline it without giving umbrage, or perhaps offence; we therefore endeavoured to equip ourselves in the best manner we were able, and in doing so we reserved our uniforms, which were extremely rotten and unfit for any service on horseback, for the purpose of appearing in on our visit of ceremony to his Excellency. The fresh horses which had been sent from St. Jago, we had imagined to be like those which had brought us from Valparaiso, but, to our great astonishment, those which had now arrived from the President under the care and directions of another officer, seemed to be very high-bred animals; and were all richly caparisoned with fine saddles and bridles, and saddle cloths richly decorated, and fringed with gold and silver lace, according very ill with the dress in which we were under the necessity of appearing. All my former objections to a public entry were now greatly increased, and I became very desirous that we might be permitted to visit St. Jago in a more private manner; but on representing this to the officers, instead of acceding to the wishes of myself and party, whips and spurs were instantly produced, that nothing might be wanting to complete our appearance on horseback in every particular. The use of the spurs however was generally declined by us all, lest some embarrassment or mischance should take place from their being unintentionally applied, whilst our thoughts were engaged by the new objects that were likely to attract our attention as we passed through the streets of the city. Trivial as this circumstance may appear, yet to the officer who had charge of this escort it was a matter of the first importance. He not only used all his eloquence to persuade us to wear the spurs, but even expostulated with us on the impropriety of appearing without them, and the unreasonableness of our declining so essential a part of dress; all his intreaties were not, however, sufficient to overcome our objections, and to

his great mortification we mounted without them, and proceeded towards the capital, with a true military step, attended by the two officers, and our former guides the dragoons.

The inconvenience we experienced on first setting out, from being equipped in this very extraordinary manner, was greatly increased by the crowds of people who had assembled to see our cavalcade pass along, in which they were fully gratified by the slowness of our pace, until we arrived at the palace; where, on our alighting, we were received by a guard which was turned out on the occasion, and were conducted in form to the audience chamber. Here we were received by his Excellency Don Ambrosio Higgins de Vallenar, with that sort of unaffected welcome in which neither ceremony nor flattery appeared, and which amply repaid us for all the little sufferings we had endured in the course of our journey. This polite and cordial reception we had indeed anticipated from the reports we had received, before our departure from Valparaiso, and afterwards on the road to St. Jago. His Excellency's character, not only in respect of his great attention and urbanity to strangers, but of his parental care and constant solicitude for the general happiness and comfort of all the people who lived under his government, were the constant topics of our conversation; and it is not to be wondered at if, on this occasion, we became instantly impressed with the justice which report had done to his virtues, by his congratulations and hearty welcome to the capital of Chili, which were delivered by him in our own language with a fluency that greatly excited our astonishment, when we were informed by his Excellency, that he had now been resident in New Spain twenty-four years, during which time very few opportunities had occurred to him for speaking English. We now learned from Don Ambrosio himself that he was a native of Ireland, from whence he had been absent upwards of forty years, that at an early period of his life he had entered into the English army; but not obtaining in that service the promotion he had expected, he had embraced more advantageous offers on the continent. His first commission in the service of his Catholic Majesty was in the corps of engineers, from whence he exchanged into the dragoons, and was soon raised to the rank of lieutenant-colonel; in this situation he served for some time in Old Spain, and afterwards in this country, until he obtained the distinguished post of military commander on the frontiers of Chili, and governor of Conception. In this service he was employed twelve years, and had the good fortune, by the constant exercise of his humanity, and an uniform attention to the comforts of the native inhabitants of the country, so to subdue the natural fierceness of their dispositions, as to induce them to submit to the government of Spain. For this essential service he was

promoted about the year 1783 to the exalted station he now fills; since which time he has been honoured with repeated marks of approbation and distinction by his Catholic Majesty, who has been pleased to confer upon him the orders of Charles the Third, and St. James, with the rank of lieutenant-general in the Spanish army.

A room of considerable dimensions was allotted to me in the palace, and a large apartment adjoining to it was appropriated to the use of Mr. Puget and the rest of the officers, in which were a sufficient number of small beds for the party, covered with thin gauze, as a protection against the musquitos. The two dragoons who had attended us from Valparaiso were now appointed to be useful to us in the capacity of servants; and every other matter was attended to, ordered, and settled, that evening, which could in any way contribute to render our stay at St. Jago, and our residence in the palace, as pleasant as possible. Nor did the politeness of the President end here, for, previously to the supper being announced, he introduced to our acquaintance Don Ramon de Rosas, the corrigidor, and Don Francis Cassada, a captain of dragoons, who received the President's directions to use his utmost endeavours in shewing us every thing in St. Jago worthy the attention of strangers, and to make us known to the principal families residing in the city.

The supper, consisting of a great variety of hot dishes, was served up on silver, at which no person was present but Don Ambrosio the President, Don Ramon de Rosas and ourselves; all sort of ceremony was now laid aside, and agreeably to the repeated intreaties of his Excellency, we considered and felt ourselves as much at home as if we had been partaking a repast in England with our most intimate acquaintances. The first part of our conversation was chiefly engrossed by inquiries respecting our late discoveries on the northwest coast of America. In this I was very happy to learn, that no part of our conduct, or transactions with any of the subjects of his Catholic Majesty, appeared to have given the least cause for jealousy, or complaint against our little community; and I was also much gratified by the very handsome compliments that were paid to myself and officers, on the successful labours of our voyage. After the curiosity of the President, and Don Ramon was somewhat satisfied on this subject, the former, with great indignation, recounted a circumstance which I cannot forbear to mention, although, being a matter only of conversation, it may possibly appear too extraneous.

At the time when his Excellency was the governor at Conception, and during the late American, French, and Spanish war with England, an enterprise was meditated and planned by the Court of Great Britain against that place, which was then the seat of government in the kingdom of Chili.

When Sir Edward Hughes sailed with his fleet from England to the East Indies, it was generally believed that he was to have acted only in defence of our establishments in that quarter, but before that admiral had reached the first place of his destination in the East Indies, the President stated to us, that he was in possession of a copy of Sir Edward Hughes's orders, which had been transmitted to him at Conception from Old Spain, by which documents he became informed, that an attack was purposed to be made by that fleet from the East Indies on the Spanish settlements in South America, and that Conception was the place against which the enterprise would first be attempted. In consequence of this intelligence a general alarm took place throughout all the establishments on the coast; the fortifications, which had been much neglected, were repaired and strengthened; the number of troops attached to each were greatly augmented; and every preparation was made for the purpose of acting vigorously on the defensive; and to this circumstance alone his Excellency attributed the abandoning of the design, that had been concerted by the British Cabinet.

Soon after supper was ended, a number of ladies made their appearance at the iron grating that protected the window of the palace, begging our acceptance of nosegays, and requesting that we would join the rest of their party, assembled at a little distance from the palace; but as I thought it would be more respectful to pay our compliments to his Excellency in the audience-room, which formality was fixed for the succeeding morning, before we should visit any one else in the city, we declined their obliging invitation for the present, with a promise of acknowledging their civility the following day.

We did not retire until an early hour, when we found our beds tolerably good, but we could not help being much disgusted at the insufferable uncleanliness of our apartments; the floors of which, but more particularly that appointed for the residence of the officers, were covered with filth and dirt. Application was instantly made to the dragoons, to procure us some brushes or brooms in order to sweep it out, but, to our great mortification, they told us that such things were not in common use at St. Jago; so that the only alleviation we could obtain was that of water to sprinkle the dust, which was so thick in the officers' apartment, that it would rather have required a shovel than a brush for its removal.

Every Sunday morning the President has a levee, which is usually attended by the military people, and the principal inhabitants of the city and surrounding country. For the purpose of being formally introduced at this levee, we made ourselves as smart as the exhausted state of our respective

wardrobes would allow, and then repaired to the audience chamber; this room, which is spacious, was neatly, but not extravagantly, furnished; the anti-chamber was large in proportion, and the entrance to each was from the ground, through large folding doors. In the anti-chamber were the portraits of the several presidents of Chili, from the first establishment of the Spanish authority in this part of the country, to the present governor, whose portrait was one of the number. The inside walls of these rooms were covered with glazed tiles, resembling those from Holland, for about eight or ten feet from the floor, which had a good effect, and was a great relief to the dead white plaster of the remaining part up to the ceiling. At the upper end of the audience-room was a small stage, raised a few feet from the floor, upon which was placed the chair of state, ornamented with a canopy of red damask, and decorated with the portraits of their Catholic Majesties, which were placed on each side of the President's chair. The levee was attended by about one hundred and twenty persons, the greater part of whom appeared in the regimentals of the established militia of the country; and, in such a well dressed company, our thread-bare uniforms suffered much by comparison. I had, however, taken the precaution to apologize to his Excellency for the reduced state of our apparel, and he did not fail, on introducing us to his friends, to enumerate the hardships we had undergone, to state the length of time we had been absent from the civilized world, and to conclude, on every occasion, with some panegyric on the laborious undertaking in which we had been so long engaged. This very polite and friendly attention soon relieved us from any embarrassment which, at first, it was natural we should feel in being thus unexpectedly thrown into a circle of gentlemen, who made a very splendid appearance, and who seemed to have great pride in conforming to the fashion of the day, and the etiquette of court parade. From all the gentlemen, to whom we were made known, we received the most flattering congratulations on our arrival at St. Jago, accompanied by very friendly invitations to their houses; and every one appeared to be anxious to make our time pass as pleasantly as the circumstances of the place would permit. The specimen we had already received from our very hospitable friends at Valparaiso, left us no room to doubt the sincerity of these strangers, whose kind solicitude to gratify our inclinations on every trivial occasion, was infinitely greater than could reasonably have been expected. After we had severally paid our compliments to the President, the levee broke up, and we followed the rest of the party, accompanied by Don Ramon and Captain Cassada, to the levee of the Bishop of Chili, which always commences on the conclusion of the President's. Here we were again received with the same politeness and affability which had marked our reception at Don Ambrosio's. The Bishop is addressed by the title of Illustrissima, and the palace in which he constantly resides, in point of magnificence and show, exceeded, in a great degree, every house in St. Jago, not excepting the President's, to whom the Bishop is the next person in rank and consequence. The rooms here were not so large as those of the royal palace, but they were sufficiently capacious and well proportioned; the walls were hung with yellow silk, festooned at the top, the furniture was rather gaudy than elegant, yet every object bespoke the richness and exalted station of the illustrious owner. The Bishop was dressed in a loose clerical garment of purple silk, buttoned close, with a sort of apron that extended round his waist, and reached below his knees. This part of his dress, I was given to understand, is commonly worn in Spain by the dignitaries of the church.

The same persons who had attended the levee of his Excellency, repaired with us to the palace of the Bishop; but their deportment here, in point of respect, far exceeded that which had been shewn to the President. Many priests attended the levee, one of whom always conducted to the Bishop the person who was to be introduced, who when sufficiently near, bent one knee, and received in that submissive attitude the benediction of the church. On this occasion, the Bishop with one hand made the figure of a cross over the head of the person introduced, whilst he presented a ring which he wore on a finger of the other, to receive an additional homage, paid by touching it with the lips, as in the act of kissing. This ceremony was not restricted to a few, for we did not perceive any one in the group that did not go through it; and, as I had made it a constant rule to conform, on all occasions, to the innocent manners and customs of whatever country we might chance to visit, I should not have hesitated to perform the like ceremony on our introduction, had the slightest hint been given, either by Don Ramon or Captain Cassada, that it would be expected from us; but, as their silence left us completely to our own feelings, we each of us simply made our bow, which appeared to be as well accepted, and to receive as gracious a benediction, as if we had adopted the other customary formality.

The Bishop made many very pertinent inquiries respecting the countries we had visited, and seemed to have great pleasure in the little information we were able to afford him; for at this time, we had not an interpreter with us, who so perfectly comprehended what we described in English as to make a faithful translation of it to the Prelate; and I do not recollect that I ever felt more real regret, than on this occasion, that I did not sufficiently understand the Spanish language to hold a conversation with this apparently intelligent gentleman, who was pleased to embrace every opportunity of bestowing some encomium on our late researches, and to offer his congratulations on our having so happily concluded them.

From the Bishop's palace we were conducted, by our friends, to the houses of the judges and great officers of state, in all of which we experienced the same cordiality and friendliness, and received the same pressing intreaties to visit their families as had uniformly been offered by every person with whom we had become acquainted since our first arrival in this hospitable country. About two o'clock we returned to the palace, where we found the President waiting our arrival for dinner, which was served up on a plain deal ill constructed table, by no means corresponding with the magnificence of the dinner service, which was intirely composed of silver. The company consisted of the President, Don Ramon de Rosas, Captain Cassada, and ourselves; and the conversation turned chiefly on the late labours of our survey, and the discoveries we had made on the coast of North-West America, which were repeatedly honoured with the most flattering commendations from the Captain-General, who appeared to be extremely interested in the events which we related.

After drinking coffee, which is always brought in as soon as the cloth is removed, every one retired to his private apartment, a custom which so generally prevails in this kingdom, that, between the hours of three in the afternoon and six in the evening, no person is seen in the streets, the shops are shut up, and the same stillness prevails as if it were actually night. Accustomed as we had hitherto been to a life of constant anxiety, and to be satisfied with little rest, we were at first greatly at a loss to discover how we should employ the hours which were thus dedicated to sleep by the society in which we were now living; but the exercise of the morning, the heat of the weather, the want of occupation, and the natural inclination to sleep after a hearty meal, soon reconciled us to the practice of the country; and we all indulged in a *siesta*, (or *afternoon's nap*) and enjoyed it I believe full as much as the most voluptuous Spaniard in the capital.

Accompanied by our new friends, we were introduced in the evening to the family of Sen<sup>r</sup> Cotappas, a Spanish merchant of considerable eminence. A description of this gentleman's mansion will serve to convey an idea of the manner in which all the houses in the city of St. Jago are built. This, like most of the principal habitations, formed a quadrangle, inclosing an open area, or court-yard, of about thirty yards square, one side of which is a dead wall that runs parallel to the street; and, as none of the houses are more than one story in height, this wall totally obscures every appearance of the buildings within. The entrance into the fore-court from the street, was through a gateway in this wall, to which the house fronted, occupying the opposite side, whilst the wings, or two remaining sides of the square to the right and left, were, as is most commonly the case, divided into offices for

servants, and sleeping apartments. Sen<sup>r</sup> Cotappas's house consisted of an anti-chamber, a large kind of dining-parlour, and bed-chamber. All the rooms were very spacious, the principal one measured about sixty feet in length, twenty-five feet in breadth, and I should think the height of it was about equal to the breadth. This room was superbly, or rather finely, furnished; from the ceiling were suspended two glass lustres, or chandeliers; and on the walls were some paintings, the subjects of which were taken from the sacred writings; at each end of the room were large folding doors. The company we here met were divided into two parties; the ladies were seated on cushions on one side of the room, and the gentlemen were sitting opposite to them on chairs, amongst whom we were instantly furnished with seats. The entertainments of the evening consisted in a concert and ball, in both of which the ladies had the principal share, and seemed to take great pleasure in excelling in both the accomplishments of music and dancing. The whole of the concert was performed by the ladies; one led the band on the piano-forte, whilst the others filled up the accompaniments on violins, flutes, and the harp; the whole was extremely well conducted, and afforded us a musical treat, to which we had been long intire strangers.

We should have been extremely happy to have availed ourselves of the pressing intreaties of Sen<sup>r</sup> Cotappas to join with the ladies in dancing, but as their country dances appeared to be very difficult, and as no one amongst us could recollect the figures of any of those we had been accustomed to in England, we were under the mortification of acknowledging our ignorance, and declining the intended civility of the master of the house. From this disappointment in the pleasures of the evening we were, however, in some measure relieved, by some of the ladies, who had retired from the dance, sending us a message, requesting we would join their party on the cushions; with this we instantly complied, and considered ourselves greatly indebted for this mark of condescension, as it was departing from the established rules of their society on such occasions. The generality of the ladies in St. Jago are not wanting in personal charms, and most of those we had the pleasure of meeting this evening might rather be considered handsome than otherways; they are, in general, brunettes, with expressive black eyes, and regular features; but a want of that neatness, which is so much valued amongst Englishmen, and so much the pride of my fair countrywomen, was conspicuous in many particulars, especially in the total neglect of their teeth, which are suffered to become intolerably dirty. This inattention was not only in a very high degree offensive, but it appeared to us incompatible with the pains that seemed to have been taken in the decoration of their persons; for, at this assembly, they were all superbly dressed, agreeably to the fashion of the country. The most singular part of their dress was a sort of bell-hooped petticoat, that reached from the waist to just below the knees, though some of them did not wear them quite so low; immediately beneath this external part of their dress appeared the under linen garment, the bottom of which, as well as the tassels of their garters, was fringed with gold lace.

The general deportment of the ladies was lively and unreserved; and they very obligingly lost no opportunity of relieving us from every little embarrassment, to which the disadvantages we laboured under, in not understanding their language, frequently exposed us; and I verily believe that there were few occasions, during the whole of our voyage, in which our want of knowledge of the Spanish language was more sincerely regretted; as it deprived us of the pleasure of enjoying the lively sallies of wit which we had reason to believe occurred very often in the female circles, by the laughter and applause that their conversation so frequently occasioned. This was certainly an evidence of their natural ingenuity, though it did not amount to a proof of their minds having been duly cultivated; and it is not without concern that I state, from the testimony of their own countrymen, that the education of the female part of the society in St. Jago is so scandalously neglected, as to confine the knowledge of reading and writing to a few of the ladies only. Some of them had the goodness to give us their names in writing, that we might the more easily discover and learn the true pronunciation of them; these were always written in large letters; but I do not mean from this circumstance, or from our having received but few of their names, to infer, that the education of the sex is as much confined as was represented to us; yet the circumstance of their being totally unacquainted with any other language than the dialect of the Spanish spoken at St. Jago, evinced that their education had been very little attended to.

Excepting the instances which are unhappily to be found amongst the sex in England, the female part of the society possess a characteristic delicacy of sentiment and expression; but here such a degree of levity is observable in the conduct of the ladies, not only in their conversation, but in dancing and on other occasions, as to give a stranger, and particularly an Englishman, no reason to entertain a very exalted opinion of their virtue, but rather to impress him with notions prejudicial to the female character. I must, however, in justice to all those ladies with whom I had the honour of being acquainted, and they were very many, beg leave to state, that I discovered nothing that could impeach the fidelity of the married women, nor attaint the character of the single ladies; notwithstanding that the manners and customs of the country in which they live sanction a freedom of speech, and a familiarity of behaviour, that tended, in our opinion, to

abridge the sex of a portion of that respect from the men, of which, as Englishmen, we did not like to see them deprived. To them we were indebted for the most civil and obliging attention that can be imagined during our residence in the capital; their doors were always open to receive us; their houses were in a manner our homes; their entertainments were formed for the sole purpose of affording us amusement; and no endeavour was omitted that could, in any way, contribute to the pleasure we received in mixing with their society. Nor were we less indebted to all those gentlemen to whom we became known, who exercised the utmost of their powers to render our stay at St. Jago agreeable, by shewing us every thing worthy of our notice, and by communicating every information that was either useful or entertaining. We were under particular obligations to Don Ramon de Rosas and Captain Cassada, for their unremitted attention, and goodness in introducing us to all the respectable families residing in St. Jago.

The time that we remained in the capital of Chili, passed nearly in the same manner as I have already described, without the occurrence of any incidents to require a particular relation; for this reason I shall pass over the several pleasant engagements we had in the different families during our residence in this hospitable place, and proceed to give some account of the public buildings in the city, and to detail such other information as we were enabled to collect, and which, probably, may not be unacceptable to my readers. In doing this, however, I shall not pledge myself for the authenticity of the facts, nor the precision of the circumstances I am about to relate, because I was not sufficiently acquainted with the Spanish language to put the questions that I wished to have resolved in a proper way myself, nor to acquire the information I sought for, in so correct a manner as is desirable in inquiries of this nature; in addition to this disadvantage, I found it almost impossible, on a variety of occasions, to make our interpreters translate our questions on subjects on which they were not conversant, so as to obtain, from those who were able to reply to them, satisfactory answers.

The city of St. Jago, including the detached houses, or suburbs, I should suppose, cannot be less than three or four miles in circumference; but this is only by estimation, as I did not converse with any one who could, or did, answer me this question; but as the streets run at right angles to each other, and some of them are little short of a mile in length, this computation cannot be very erroneous. The city is well supplied with water from the river Mapocho, which has its source in the mountains, at some distance from the capital, and is made to branch off in such a manner, on its approaching the town, as to pass through the principal streets. This, in a hot climate, cannot but be supposed a very great luxury, and as conducing extremely to the

health of the inhabitants; but the same want of cleanliness that pervades the insides of the houses, here manifested itself in the open air, and instead of this stream becoming the means by which the streets might have been kept constantly sweet, it is rendered a most insufferable nuisance, by the prodigious quantity of filth which is emptied into it from the houses. As no care was taken that a sufficiency of water should be brought down to carry the soil and nastiness away, nor to remove it in places where it formed obstructions to the current, and produced the most offensive exhalations; and as the streets, which are narrow, are partially paved with small stones in the middle, and with only a few flag-stones for foot passengers on the sides, our walking about the town was, from these circumstances, rendered very unpleasant.

The river before mentioned, from whence the city is supplied with water, overflowed its banks, in the month of June, 1783, in consequence of an inundation, and rushed down towards St. Jago, with such impetuous fury, that it demolished almost all the dams that defended the country, did considerable damage in the town, and filled every individual with fear and consternation lest a second inundation should succeed; in which case, from the extremely defenceless state in which these torrents had left the city, there was great reason to apprehend that not a single edifice would be left standing in the capital. The present Captain-General gave immediate orders that plans should be made by the most able and experienced engineers and architects, for the purpose of replacing a wall, or dam, that had principally defended the city from the river, and which had been destroyed, at this time, by the inundating force of its waters; but, notwithstanding that the design he had in view was for the protection of St. Jago and the surrounding country, and to insure the safety, interests, and comforts of the inhabitants, yet, a popular party was made against him, as in the instance of the new road, which he projected, and is now carrying into execution between this place and Valparaiso, and, after experiencing much fatigue, perplexity, and expence, it was not until the month of January, 1792, that he effected his purpose so far, as to begin the excavation for the new wall, or dam, against the side of the river. This will long remain a monument of his patriotism and perseverance, and he has now the gratification of hearing many of those who had before opposed the undertaking, acknowledge this valuable design to be an effectual protection against any future danger.

The wall is said to have a foundation fourteen feet below, and to rise as many feet above, the surface of the water; it appeared to be a very strong work, well executed, and capable of resisting any force or weight of water that may come against it. It not only affords complete security to the town,

but serves as an agreeable walk for the recreation of the inhabitants. On the side next to the water a parapet wall is raised, sufficiently high to prevent any accident in walking; it is about a quarter of a mile in length, and, at convenient distances, flights of easy and commodious stairs are judiciously placed to ascend the wall, from whence a commanding view is obtained of St. Jago and the adjacent country. The whole is built with brick and limemortar, and, on the first stone being laid, an obelisk, in imitation of that in St. Peter's square, and many others in Rome, was erected, on the pedestal of which is the following inscription, in Spanish:

D. O. M.
In the reign of Charles the Fourth:
and
During the Government of this Kingdom,
by
Don Ambrosio Higgins
de
Vallenar;
Who ordered
These dams to be constructed
in the year
1792.

There were two very sumptuous fabrics erecting in St. Jago, which, when finished, as I was informed by the President, would be unequalled in New Spain; the one is the Cassa de Moneda, or the *money-house*, and the other is the cathedral.

At the distance of about five quadras<sup>[4]</sup> to the southward of the principal square, is erecting, by order of his Catholic Majesty, the Money-House, or Mint. The situation is open, healthy, and well chosen for this extensive and spacious building, which appeared to be constructing upon the plan of the public offices contained within Somerset-House in London, though the structure is by no means equal to that edifice, either in size or magnificence. It is intended for the residence of all the officers and people belonging to the Mint. The apartments for the former are large and commodious, and the rooms for the latter are very convenient. To these are added a sort of hospital for the sick, and a chapel for divine service. Large places are to be fitted up for the reception of the materials and implements used in assaying the precious metals, and separating them from the ore. The walls are built with large bricks, and the cement, or mortar, is from lime procured by the

calcination of shells. Part of the inside was plastered with a most delicate white substance, that had the appearance of being very durable. Most of the iron work used in the building, and such as is necessary for the implements, &c. used in the business of coining, is imported from Old Spain. Patterns for the balconies, balusters, and rails, have been transmitted from St. Jago to Biscay, which have been sent back in iron, most perfectly and satisfactorily executed. All the wood made use of in this fabric is oak, excepting for the doors and windows, which are made of cypress. The principal front is to the north, and is about one hundred and fifty yards in length. Besides the door, or grand entrance, which is adorned with eight columns, there are eighteen inferior windows, and eighteen superior balconies. The two other fronts look to the east and to the west, and are each of them one hundred and seventyeight yards in length; these are decorated in the same manner as the principal front, with pillars and balconies, between which are various escutcheons, with devices alluding to the purpose for which the building is erected. The court-yard is forty-five yards square, the whole adorned with columns, architrave, frize and cornice, which extend round the court at some little distance from the building. The principal entrance leads into a spacious saloon; on the right are the apartments destined for the superintendent, and on the left are to be those of the auditor; beside these, in the other two fronts, are the public offices, the hall for drawing bills, the office for weighing gold and silver, the treasury, auditory, chapel, hospital, &c. &c. After passing through the court-yard towards the smelting-offices, we entered a passage, fourteen yards wide, which led round all the workshops and offices of labour: the whole of the edifice is of the Doric order, and the distribution of the offices and apartments appeared to have been well considered and judiciously appropriated. The communications were likewise commodious, and well concerted to facilitate the business between one office and another. and the whole together was a structure well deserving our attention.

The architect is professor Don Joa. Joesca, disciple of the lieutenant-general Don Francisco Savatini, first architect to his Catholic Majesty. Don Joesca undertook to finish and complete this building for seven hundred thousand dollars, and the Captain-General, impressed with a just idea of the use and importance of such an establishment, was induced to give his consent to the undertaking, as the calculation of the expence bore, in his estimation, no proportion to the advantages it would afterwards insure, or the convenience it would afford. The architect, however, seems to have been greatly mistaken in the money which he stated the building would cost, as the President assured me, he was clearly of opinion, that it would require a

million and an half of dollars to be expended on the edifice before it could be completely finished.

There is a small hill, about twelve quadras distant from the principal square, in the grounds belonging to the religious of the Dominican order, which is called St. Domingo. This hill contains a quarry of freestone, of a whitish colour, soft, and easily worked by the chissel. The vicinity of this hill to the city, and the facility with which the stones were to be procured from the quarry, induced the Bishop Don Juan Gonzales de Melgarego to begin the laborious undertaking of building a cathedral; for which purpose he gave forty-three thousand dollars towards its erection, and laid the first stone of the edifice on the first day of July, 1748. At this time there was not an artist in the kingdom of Chili to whose ability a work of this description could be intrusted, for which reason no particular plan was adhered to, and the architecture seems to be a medley of whatever occurred to the persons who superintended its construction. The principal front is to the east; that side which communicates with the episcopal palace is to the south, and the north front runs parallel to the street. The length of the building is about one hundred and twenty yards, its breadth is not less than thirty-five, and the height of the middle aisle is eighteen yards.

It was not until after thirty years were expired, that application was made to Madrid for a skilful professional person to superintend the completion of this edifice. In the year 1775, Don Joesca, the architect employed in building the money-house, was appointed to this office, and, fortunately, at this time, the principal front was not begun. The plans he drew were submitted to the then prelate, Don Manuel de Alday; and, on the first day of March, in the year 1780, this artist took upon himself the charge of the building, which, at this time, wanted only five arches to reach the line of the principal front; the elevation of which, I was given to understand, is a close imitation of St. John de Lateran, and according to the designs of the famous Barromini. There are three doors in this side, embellished with columns of the Ionic order; within is a handsome staircase, that leads to light and elegant towers, which add greatly to the beautiful appearance of this front. The cathedral contains ten altars, and, though they appeared to have been constructed without regard to any rule of proportion, yet they are well worthy of attention. The columns and pilasters of each are an excellent imitation of jasper; these are green, the pedestals are red, the cornices yellow, the bases and capitals are gilt, and the whole together produces a very good effect. The colour of the stone, with which this edifice is built, resembles that of the Portland stone of England; but whether it is of the same durability, or not, time only will determine. The workmanship of the mason appeared to us to

be ill executed, as few of the edges of the stones were so neatly wrought as to fit with exactness. Spires and other church ornaments, we were given to understand, were intended to be erected, but the time when the building would be finished was not ascertained; the priests, however, said mass in one part of it, which was sufficiently completed for that purpose.

A very large church is also constructing, under the direction of the same architect; this structure is built with bricks, its front is of the Doric order, with two large towers, in which considerable knowledge of beauty and proportion seems to have been displayed. The inside of this church is of the Ionic order, it contains three aisles and seven chapels.

The gaols of the city having fallen into decay some years ago, and becoming insecure for the confinement of prisoners, a large building, of the Tuscan order, was erected, and appropriated to this purpose. This structure has rather a magnificent appearance and the distribution of the cells and apartments it contains seems to have been made with considerable judgment. The centre of the building is occupied by a grand tower, in which is the city clock; and the bell, which strikes the retreat at nine o'clock; after which, it becomes the duty of the watchmen to secure all persons of suspicious appearance, or such as are found in the streets with unlawful weapons.

Beside these public buildings, about half a quadra from the principal square is a house belonging to Sen<sup>r</sup> Don Jose Ramirez de Saldana, perpetual regidor of St. Jago, and one of its most opulent citizens. The porch, which is in the centre of the principal front of this mansion, is decorated with Doric columns, and many pillars of the same order are with considerable taste arranged on each side of it. This building is reputed to be the only one in the city in which the rules of architecture have been strictly observed; and, on that account, it is highly esteemed by those of the inhabitants who have any knowledge of the art, or taste for regular compositions.

A very good house was erecting about six quadras from the square before mentioned, after a design of Inigo Jones, as a country residence for Sen<sup>r</sup> Don Jose Antonio Aldunate, the Provisor General of this bishoprick, who is justly extolled for his polished manners and literary abilities.

At the distance of fourteen quadras from the same square a chapel was building, at the expence of the friars belonging to the order of St. Francisco. The Doric prevails in the external composition of this edifice, but within the pillars are of the Corinthian order. It contains ten distinct chapels, is dedicated to our Lady of Carmin, and is called the Little Convent.

Having given some account of the most conspicuous public and other buildings, that were either finished or erecting, in St. Jago, I shall now proceed to state such information respecting the population and commerce of this city as I was enabled to procure.

St. Jago, the capital of Chili, is stated to have been founded on the 12th of February, 1541. This city is the residence of the President, who is Captain-General of the whole kingdom, and Governor and presiding Judge of the audience chamber, or court of justice. It is said to contain thirty thousand five hundred inhabitants; and, if my estimation of its extent be not very incorrect, it must be considered as populous. The subordinate cities in this great kingdom are, Coquimbo, Chillan, Conception, and Valdivia; and the principal towns are Valparaiso, Capiapo, Vallenar, St. Francisco de Borja, St. Raphael de la Rosa, La Ligua, Quillota, Los Andes, Melipilla, St. Joseph, Anconcagua, St. Ferdinand, Curico, Talca, Linares, Nueva, Bilboa, Caugeres, and others of less importance.

The kingdom of Chili is stated to extend, in a northern and southern direction, from the uninhabited parts of Atacama, which divides it from the vice-royalty of Peru, to the straits of Magellan; and, in a western and eastern direction, from the ocean to the foot of the Cordilleras, which divides it from the vice-royalty of Buenos Ayres; but I cannot help being of opinion, that the kingdom of Chili does not extend further south than the southern extremity of the isles de Chiloe, as I should consider the American coast, to the southward of those islands, to be that of Patagonia. It is divided into two bishopricks, or provinces, St. Jago and Conception, each of which are under the immediate care and direction of an Intendant; Brigadier Don Francisco La Mata Linares has the charge of the latter; and the further title of Chief Intendant of the province of St. Jago is added to the rest of the posts of honour and places of emolument enjoyed by the present Captain-General Don Ambrosio Higgins de Vallenar; the value of whose appointments amount, annually, to thirty thousand dollars, whilst those of Don La Mata Linares do not exceed ten thousand dollars. These provinces are each subdivided into small districts, which originally were known by the name of Corregimientos, but are now called Subdelegaciones.

There is about a million of specie coined at St. Jago every year, which is the fund from whence the salaries of the state officers, the military establishment, and other incidental expences of the government, are defrayed. The army consists of a battalion of infantry in Conception; two squadrons of horse, one company of dragoons, and two of artillery. The cavalry of this country are all well mounted, and extremely expert horsemen, and were they as skilful in the use of fire-arms as they are in the management of the sword and the lance, they would not be inferior to any troops of this description in Europe. I was given to understand, that in case of an attack upon Valparaiso, the principal sea-port of the kingdom, an army of eight thousand men, consisting of cavalry and militia, could there be assembled for its defence in twenty-four hours.

The country, to the southward of the river Biobio, in the province of Conception, is inhabited by a nation of very fierce Indians, who formerly committed great depredations on the frontiers under the Spanish authority, and lived in a continual state of hostility with their civilized neighbours; but, in consequence of the humane, judicious, and political arrangements which have been made, from time to time, by Don Ambrosio Higgins, the number of the turbulent spirits has been much reduced, and the natives now cease to be regarded with any apprehension by the Spaniards. In the district which they occupy, I was given to understand, there were ten thousand warriors, a robust and hardy race of men; but so far had the wise administration of the present Captain-General succeeded, in subduing the natural ferocity of these Indians, and in bringing them over to support the authority and interests of the crown of Spain; that Don Ambrosio did not entertain the least doubt of their co-operating with the forces of His Catholic Majesty, should it be necessary to call them forth against the invasion of a foreign enemy.

Independently of the warfare which these people had, for many years, carried on against the Spaniards, they were subject to continual insurrections and internal commotions amongst themselves. During the time that Don Ambrosio had the chief military command on this frontier, he happily succeeded in terminating the feuds which had so long prevailed amongst the several tribes composing this great nation, and had introduced amongst the ferocious inhabitants of this country, a spirit of industry, and a desire to excel each other in the cultivation of the ground, the breeding of cattle, and other peaceful arts; but upon his being promoted to the elevated situation which he now fills, with so much honour to himself, and benefit to the country, he was under the necessity of leaving the guardianship of these children of nature, and of repairing to the capital. Soon after his departure from the frontiers, fresh animosities, and new causes for jealousy, arose amongst the different tribes, which ended in a war, that was furiously carried on by all parties. Their peaceful and domestic occupations no longer engaged their attention, and their agriculture and breeding of cattle, which had become the sources from whence they were enabled to derive many comforts, were abandoned and totally neglected. Don Ambrosio, with the same warmth of heart and interest for the happiness and prosperity of the Indians, which, during his residence amongst them, had produced so valuable an effect on their tempers and dispositions, represented to the Court of Madrid the commotions that continued to exist amongst the Auraucan and other tribes on that frontier; and, at the same time, proposed such measures as, in his opinion, were most likely to reconcile the differences, and establish a permanently good understanding between the contending chiefs of the four Butalmapus, which are the four districts into which this nation of Indians is divided.

In consequence of this representation, and the measures recommended by the Captain-General, he was directed by the Spanish court to repair to the camp of Negrete, and there to hold a convocation, for the purpose of hearing and redressing those grievances which were stated by the several chiefs to be the causes of all their discontents: and, as the preliminary speech of the President, on this occasion, tends greatly to exhibit the natural character and general disposition of these people, I have been tempted to insert a translation of it from the Indian language, under the impression that, to those of my readers who may be curious in tracing the gradations of the human character, from a savage up to a civilized state, it may not be unacceptable.

"The speech of Field-Marshal Don Ambrosio Higgins de Vallenar, President, Governor, and Captain-General of the kingdom of Chili, to the Auraucan and other Indian nations, met in convocation in the camp of Negrete, on the 4th day of March, 1793.

"Chiefs, my antient and honourable friends; full of joy and satisfaction that I now meet upon this happy ground of Negrete, as formerly on that of Longuilmo, the great chiefs and principal leaders of the four Butalmapus, into which this valuable country is divided, that stretches from the south of this great river Biobio to the outer parts of the most southern continent, and from the Cordilleras to the great ocean; I salute you all with joy, and with the utmost sincerity of my heart. I am ordered by the king, my master, to salute you in His Majesty's name, and to congratulate you on the felicity of this auspicious day, which, through my mediation, on account of the love I bear you all, has restored the inestimable blessings of peace to the four Butalmapus.

"With the utmost precision and dispatch, I have taken care to remove every obstacle that impeded the attainment of this most welcome object. I have also been indefatigable in disposing the minds of those to peace who were restless and prone to revenge, or to take great umbrage on little occasions; and I have been unwearied in all the conferences I have had with the several chiefs, since my arrival at the fort of Angels, and in this encampment, during the time that I have waited for the arrival of those more distant leaders, who are now collected with the other members of this assembly. I have patiently and fully examined the complaints of some, and heard the excuses of others, on the distressing subject of your dissentions, your animosities, and your wars, so that nothing now remains for me to learn of all their direful causes. To-day, however, the sun shines bright, and I see, with heart-felt joy, that on my once again drawing nigh unto you, a friendly disposition appears in all, to terminate the unhappy differences which long, too long, have subsisted amongst you; and I perceive that you are prepared, once more, to unite in those sacred bonds of peace, in the full enjoyment of which I left you, on my separation from you, and departure for St. Jago. I rejoice that you all wish to bury, under the sod of this encampment, all your animosities, heart-burnings, disputes, and differences; and may the present meeting be a commencement of perpetual felicity to all the children of man who reside in the countries that extend from Biobio to Chiloe.

"Recollect your situation, O my friends, when I was appointed by His Majesty to the military command of this frontier, and destined to sit down among you. There are many amongst you, who can remember the miserable state in which I found the whole country; it was destroyed on both sides the river, it was desolate and laid waste, and all its inhabitants were suffering the dreadful calamities of unceasing furious wars, brought on by their own intemperance and unruly passions; many of whom were obliged to retire, with their women and children, to the mountains, and were reduced at last to the necessity of feeding on their faithful dogs that followed them! The great chiefs and Indians of the Butalmapus were witness of these things. Before I left you, however, (on his Majesty being graciously pleased to promote me to the presidency of the kingdom) your houses were rebuilt, your fields smiled with a yellow harvest, and your pastures were richly decorated with the herds of your cattle. Your women provided you with comfortable garments; the high-minded and unruly young men obeyed the voice of the chiefs; and none of those excesses

were practised, which, since my departure, have exceeded the cruelties and profligacy of your antient barbarism; to which you would probably have altogether returned, had it not been for the zeal of your Commander General, who reported your proceedings to me, and happily suspended, until I should be sent amongst you, the fatal effects of your discords.

"I do not, however, wish to suppress the merit to which you have a just claim, or to conceal, that, in the midst of all these disturbances, you rigorously observed the promises you made me in Longuilmo. The Spanish settlements, situated on the southern side of this great river, have been, by you, most scrupulously respected, their persons have been held sacred, their cattle have not been disturbed, and in no one circumstance have you broken the faith and good-will which you pledged yourselves to maintain. Of all this have I been made acquainted, from time to time, by the several commanders on the frontier; and for this honourable part of your conduct I give you all due thanks. What I then promised I likewise have strictly performed; I have recommended the four Butalmapus to the protection of the king; I have supplicated him to continue to them his paternal assistance; and His Majesty, with that greatness of soul, and piety of heart, which so eminently distinguish his royal character, has been pleased to order, that you shall be supported and protected so long as you may deserve the blessings of his favor, by adhering to the good, separating yourselves from the bad, and evincing, by the general tenor of your conduct, your subordination and obedience."

The humanity, good sense, patience, and perseverance, of the Captain-General, very conspicuously appear upon this occasion; and it is not less pleasing to observe, that, even amongst these untaught nations of the earth, their political engagements are scrupulously fulfilled; and that the distresses consequent on intestine warfare, have not the power to make them violate their treaties, or to break those promises which they solemnly pledge themselves to perform.

The territorial possessions of such of the Indians as have submitted to the authority, and placed themselves under the protection, of the Spanish crown, have been all confirmed to them by treaty; to be used, cultivated, or disposed of, agreeably to their own wishes or determinations; and, as an incitement to their future industry and repose, I was informed by Don Ambrosio, that he had purchased from them a large tract of land, which he had divided, and laid out advantageously, for the purposes of agriculture and breeding cattle; and had left it in their possession, under the direction of proper persons to see his designs carried into effect.

Whilst we were under the hospitable roof of the President, I had an opportunity of seeing a chief and six of the Indians, who had come to the palace to pay an annual visit of respect to the Captain-General. These people were of a middling stature, they were stout and well made, of regular features, and not unlike the North-West American Indians; they were dressed after the Spanish fashion of the country; but if an opinion can be correctly formed of the tribe they belong to from so small a sample, they would, by no means, answer the expectations I had formed of their prowess and military character. These Indians were accompanied by a Spanish gentleman, who resides amongst them in one of their villages, and is called Captain of Indians; and I understood, that to each tribe an officer, of similar rank, is attached, who presides over their interests, corresponds with the Captain-General, and, on all occasions, acts as their adviser and interpreter.

The exterior commerce of the kingdom is principally carried on from the sea-ports of Conception, Coquimbo, and Valparaiso; but the latter has the greatest share of trade, arising from its central situation, and its vicinity to the capital: the distance from St. Jago was formerly thirty leagues; but it will be decreased, when the new line of road is completed, to twenty-two leagues. From St. Jago, to the top of the first hill towards Valparaiso, a distance of about six leagues, the road is finished; between the foot of the hill and the city there are three bridges built with bricks over three swampy places, which before were frequently almost impassable, and in many other parts, where the road is depressed, it is paved across, to give a free course to the rain waters, and at the same time, to prevent any damage from their passing over the loose materials of which the road is composed. This extent of road is now become the general resort of the inhabitants, either for walking, riding on horseback or in carriages; and the valuable character who first projected it, whenever the multiplicity of his business would allow him to take any recreation of this nature, is constantly attended thither by a numerous company of the inhabitants, and on such occasions he derives a considerable degree of satisfaction in proving how easily he can travel up the first hill from St. Jago in his coach, with the assistance of four mules only.

The measured distance between St. Jago and Buenos Ayres I could not learn, but I understood that the post travels from thence to the capital of Chili in twenty days; and that the country, from Buenos Ayres until it

reaches the foot of the Cordilleras, which run in a northern and southern direction, and pass to the eastward of St. Jago, is one intire desert, without trees or any other sort of vegetation; and that it is so completely a level plain, that even a hillock does not appear on its surface.

The nearest silver mine to St. Jago is at the distance of about seven leagues, and the nearest gold mine is to the north-east of the city, at the distance of about thirty leagues.

The value and importance of this rich country to Old Spain is fully exhibited in the several ordinances, rules and directions, which, from time to time, have been issued to the Intendants of the provinces, and enforced by the supreme council of the Indies, at the express command of His Catholic Majesty. These are comprehended under distinct titles, or heads, as they have reference, or apply to, the ecclesiastical or civil government of the kingdom. The principal observances are those respecting the tenths and contributions for the endowment of the churches, and the support of the religious orders; the collection of the public revenues, the appropriation of the royal estates, the administration of justice, the regulation of the internal police, and the delegation of powers and authority in the event of foreign wars or domestic insurrections.

I was so fortunate as to obtain a translation of most of these rules by which the archbishops and chief officers of state regulate their conduct; and as it does not appear to me, that I can shew the rigid attention which is, and has ever been, paid by the Spanish court to the interests of these wealthy establishments, so well, as by quoting some few of the royal commands, I have extracted three for this purpose.

## "Number 150.

"By the Bull of Alexander the VIth, dated the 16th of November, 1501, and confirmed since by successive supreme pontiffs, the TENTHS OF THE INDIES belong to my royal crown, and half of a year's salary on the benefices conferred by me; with full dominion, absolute and irrevocable, to assist the churches with a sufficient sum annually, for the decorous maintenance of the divine law, and for a competent salary to the prelates and other ministers of the holy gospel, who serve at the altar. In virtue of which, the fundamental disposition of the ritual has been promulgated, that these objects may be duly fulfilled. My crown remains under the obligation of supplying, at the expence of the rest of the rents of its patrimony, the sum deficient to which these,

annually, may not amount, for the endowments and other holy purposes; and therefore it is incumbent upon all those acting under my royal authority to be watchful over, to have good discretion in the administration of the decimal productions, and to divide them amongst the parties interested, with due exactness and integrity, that the holy churches, parishes, and hospitals, under the immediate sovereign protection, may not feel any injury or wrong, nor my royal exchequer be called upon for its pledged responsibility. I therefore command, that the royal officers do assist at all the public sales and accounts of the tenths, and that they likewise attend to the erections and repairs of the churches, and duly examine the expence of each, and that they ultimately prevent all frauds and impositions, to the end that the participants may have their right, and that my royal estates may not be charged with any responsibility for deficiencies. Having considered that the new establishment and system of intendancies may offer doubts, on the method proposed for carrying the several regulations into effect, I have thought proper, conformably to the true spirit of the laws already in being, to annex the following commands, for the purpose of facilitating the new arrangement, and to insure the most exact execution of all the matters it contains "

Here follow directions for the calling of meetings, and a list of the officers commanded to attend them, with a great number of rules for securing to the government a due administration of their several functions. And it will be seen, by the following extracts, that the happiness of the people, the preservation of good order, and the improvement of the country, are objects not less regarded by the Spanish monarchy, than the establishment of its religious persuasion, or profiting by the immense wealth which South America is capable of yielding.

"Confiding in the care and attention which has been manifested by the Intendants of provinces, I command that they do, by means of themselves, or subaltern judges, gain a thorough knowledge of the lives, inclinations, and customs of the people subject to their government; that they chastize the lazy, and those of bad intentions, who, far from supporting the good order and police of their respective towns, cause inquietudes and scandal, disfiguring, with their vices and laziness, the good face of things, despising the laws, and perverting the designs of those amongst

them who are virtuously disposed. They are not, however, under colour or pretext of their authority, to be inquisitive, or to meddle in the life, genius, private pursuits, or domestic concerns of individuals, nor to take cognizance of reports or unestablished accusations that cannot influence the good example of the people, nor disturb the tranquillity of the public government.

"For the due administration of justice, and the circumstances which have already been provided for by the foregoing articles, it appears, that whatever may conduce to the happiness or prosperity of my vassals, should and ought to be diligently attended to and observed by the magistrates and officers of police. For this especial purpose, I order that the Intendants do procure, from engineers of the greatest renown and abilities, topographical maps of their respective provinces, in which are to be distinguished their boundaries, mountains, woods, rivers, lagoons, and all other matters worthy of note; and to this end, the engineers so employed are to execute their commissions with all the promptitude, exactness, and punctuality of expression possible; they are to become acquainted with the temperature and qualities of the several soils, and of the natural productions, not only of the animal and vegetable, but of the mineral, kingdoms; of the mountains, vallies, pastures, and meadows; of the rivers which are capable of being widened, made navigable, and ultimately to communicate with the ocean; the expence of such undertakings, and the benefits that would result to my subjects from carrying such works into effect. They are to make themselves perfectly satisfied in what places new channels or aqueducts might be made, which would be useful for the watering of the lands under cultivation, and for the purpose of reducing labour by the erection of mills. To report the state of the bridges; pointing out those which require repairing, and the passes over which additional ones ought to be thrown. What roads can be amended, improved or shortened; what protection or guards are necessary for their security. In what parts are growing timbers, useful for ship-building in the provinces, or valuable in the European arsenals; they are to certify and report upon the industry and commerce of the districts; the sea-ports capable of sheltering vessels, which from their situation and utility ought to be kept open, and such as are prejudicial that had better be shut. The Intendants will also inform themselves of the means of bettering the condition of my people, by augmenting their comforts, and by conserving the happiness and prosperity of my dominions. With these objects before them, they are to take especial care, that, in the towns or villages, within their respective provinces, they do not allow of vagabonds without destination, nor people without inclination to work; but that they make the sturdy, and of competent age to manage arms, inlist into my royal regiments, engage in my marine service, or on board ships of commerce; or else that they order such persons to be employed in the repairing or erecting such public works, as shall be judged most proper, according to the circumstances of each individual's case. Should any such persons be unfit for work, and mendicants by profession, they shall be taken up, put into hospitals, and there be employed each according to his strength; but if it can be proved that they are restless unquiet subjects of no responsibility, and bad character, the penalties established by the laws of the Indies are to be inflicted, and such vagrants are to be sent to hard labour in the mines, or to the Presidios."

These ordinances are also the first of a great number of regulations, which follow for the encouragement of industry, the cultivation of the surface, and extending the mineral property of these kingdoms, in which is displayed no less zeal and concern for the prosperity and comforts of all the inhabitants, whether of Spanish extraction or the native Indians, than for the interest which the Spanish crown possesses in securing to itself the monopoly of this valuable part of its extensive empire. For as the kingdom of Chili cannot but be regarded as capable of producing great wealth, as well from its surface as from its inexhaustible mineral productions, it may fairly be esteemed as one of the richest territories belonging to his Catholic Majesty. In order, however, to promote the growth of the greatest quantity of corn and number of cattle, encouragement should be given to the lower orders of the people to become industrious, and to prefer the pleasant pursuits of cultivation to that supine and inactive way of life to which they have been so long accustomed; for if a spirit of industry were generally diffused amongst them, and due rewards held out for working the valuable metals, the present habits of indolence would probably be overcome; and as there does not exist any physical impediment to exertion, either from climate or any local circumstance, it is not possible to ascertain what might be the sum of the return from the productive labour of this highly favored country, when such labour should be properly directed to the several sources of its latent wealth. The influence of the ecclesiastical orders over the minds of the people, and the preference which is given by them, and the generality of the

inhabitants, to an useless unworthy life of laziness and begging, will continue to operate against any change; and it is much to be apprehended, that nothing but a totally new modification of their present scheme of society, can insure to the individuals, and to the state under which they are protected, the advantages that a reform in their political system promises in future to bestow.

Considering that the time we had now been absent from the vessels had been of sufficient length to accomplish the several services I had left to be performed, preparations were made for our return to Valparaiso; and after expressing our most grateful acknowledgments for the weighty obligations conferred upon us, by the unremitting attention to our present comforts, and anxious concern for our future welfare, which on every occasion had been exhibited by his Excellency the President, and making offer of our best thanks for the friendly, hospitable, and polite entertainment we had received from other individuals during our stay in the capital, we took our leave, and proceeded from St. Jago toward Valparaiso. The same mode of conveyance as that to which we had before resorted, was now adopted for our journey back to the sea coast. Neither the road we had to retrace, nor the country on either side of it, presented any thing in the course of our travelling worthy of remark, that I have not sufficiently noticed on our journey to St. Jago, excepting that the road, which from the looseness of the materials with which it is formed, had differed, as I suspected it would, very much by the descending waters from the mountains, and in many places it was greatly injured by the rain that had fallen during our residence at St. Jago; and it is much to be feared, unless some means can be adopted for its security, and to prevent the injurious effects of the descending torrents, that this valuable design projected by Don Ambrosio will in a great measure be defeated.

On our arrival at Valparaiso I found most of our business in a state of forwardness; the main-mast had been repaired and was got on board, but on our attempting to rig the main-yard, on Thursday the 16th, it was found to be rotten nearly half through in the middle of it, and in this state intirely unfit for service; this was a mortification I did not expect to have met with, and as there was no possibility of procuring at this place a spar of sufficient size to replace it, the only means we had of repairing the defect was by making a temporary yard out of a spare maintopmast, with the addition of the yard arms of the yard which was decayed, and which I was extremely sorry to observe were by no means in a perfectly sound condition.

Although a further detention at Valparaiso was now unavoidable, yet that was not the only circumstance which produced me concern on this occasion;

for this additional disaster was of so serious a nature, that when I came to reflect on the disabled condition of our main-mast, and that our main-yard would be in *three pieces*, I was under the cruel necessity of giving up all further thoughts of recommencing our survey of the coast to the southward of the islands of Chiloe, and to determine on making the best of our way from this port round cape Horn to St. Helena. I could not, however, avoid having some apprehension lest our very crippled state should prove insufficient to preserve the vessel amidst the boisterous seas we had to encounter in this passage, notwithstanding that every precaution within our power that could be devised was resorted to, for the purpose of making the mast and yard as secure as possible.

The regret I felt in being thus compelled to abandon the examination of this almost unknown, yet interesting part of the coast, is not to be described; because I had anxiously hoped that I should have been enabled by our reequipment at Valparaiso, to have carried into effect the whole of the commission which his Majesty had been pleased to entrust to my execution; but under all the circumstances of both the vessels' condition, I did not consider myself warranted to indulge my inclinations at the hazard of his Majesty's ships under my command, and at the risk of the lives of so many valuable men, who had cheerfully endured the fatigues of our former survey, and who, after so long an absence from their native country were intitled, in a peculiar manner, to every care and protection that were in my power, for the purpose of insuring them a safe return to their families and friends.

The main-yard was sent on shore, and the carpenters were immediately employed upon it; but as I could not flatter myself that it would be in a state fit to be received again on board in less than eight or ten days, I employed this interval in examining the stores and provisions with which we had been supplied, in attending to the repairs of the vessels, visiting the observatory on shore, and making some observations on the harbour and town of Valparaiso; with which, and the result of the astronomical and nautical observations made during our stay, I shall conclude this chapter.

The caulkers were yet busy on the decks and other parts of the Discovery, and the rigging demanded infinitely more repair than I had supposed it would have required, owing to the very rotten and decayed state of almost every rope on board. In these essential services the artificers were constantly engaged, whilst the rest of the crew were employed in procuring a full supply of water, and such a stock of flour and other provisions as I considered would be necessary until we should arrive at St. Helena.

Ships destined to the port of Valparaiso, should endeavour during the summer months to make the coast well to the southward of the bay, in order that a fair wind may be insured for entering the bay. The southerly winds, which in general extend from 60 to 70 leagues from the coast, mostly prevail until the month of May; and from the middle of that month during all the months of June, July, August, and September, I was given to understand the prevailing winds were from the north. These winds are commonly attended with great quantities of rain, and very foggy weather, but they do not often blow with much violence. As soon as the wind returns to the southward the dry season commences, and so it continues with little variation during the remainder of the year. These winds, however, frequently blow very strong, so as to break vessels adrift, though well secured by anchors on the shore, near to the town of Valparaiso. Within four or five leagues of the point of Angels, which is the western point of the bay, is a low rocky point, near to which is a detached high barren rock; these points lie from each other S. 51 W. and N. 51 E. To the northward of the above low rocky point, are some scattered rocks, that lie about two miles from the point, and about a fourth of that distance from the shore, and to the northward of these rocks is a sandy bay, on the north-east side of which is a house. In this bay I was led to believe that anchorage might be had, though the situation is certainly very much exposed. The point of Angels, (off which are also some rocks lying very near to it,) may be approached by sailing at the distance of half a league from the shore, and as soon as the point is passed the town of Valparaiso is instantly discovered. About seven miles to the north-east from this point is a cluster of rocks lying at some distance from the shore, on which the sea breaks violently; but we had no opportunity of ascertaining their situation with any degree of precision. The bay is about four miles wide, and about a mile deep; apparently free from any sort of danger; but as it is greatly exposed to the northerly winds, the trading vessels constantly moor with two good anchors and cables in that direction, and with other cables fast to anchors on shore, in five or six fathoms water, soft sandy bottom, near to the custom-house; by which means it is expected that the officers of the revenue may be enabled to prevent any contraband trade, by vigilantly attending to their duty in the day time, and by a rowing guard during the night. The depth of the water gradually increases with the distance from the shore to 35 fathoms, and the bottom becomes more tenacious. In the depth of sixteen fathoms, in which we took our station, it was a very stiff clay. Here we moored a cable each way to the northward and to the southward, the point of Angels bearing by compass N. 35 W., the fort in the town N. 86 W., the redoubt on the hills S. 5 E., the church at Almandrel S. 65 E., the east fort N.

83 E., the east point of the bay N. 57 E., and the nearest shore S. 7 W., a cable's length distant.

On the top of a hill, on the east side of the bay, is an open or barbet battery, lately erected with stone and brick, and capable of mounting ten guns; this battery commands all that side of the bay, the beach, and the village of Almandrel. On the summit of another hill is a stone redoubt, of a circular form, with eleven embrasures; these command the beach and village of Almandrel to the eastward, the bay to the northward, and the town and harbour of Valparaiso to the north-westward. Although this fortification was in a most neglected and ruinous condition, we were given to understand, that the principal magazine was inclosed within its ruins. The largest and most considerable fortification is in the middle of the town, within which is the residence of the governor. It is situated on a small eminence, one side of which is open to the sea, and is separated from it only by a very narrow pass. The height of the lower wall, which is strong, and well built with masonry, is about fifteen feet to the embrasures; of which, there are six that front the sea, two face the street to the eastward, and two look into the market-place to the westward. The upper part of the hill is surrounded by another strong stone wall, about ten feet in height, and half way up the hill; a third wall crosses it, which shews three embrasures to the sea, immediately over the fort, and the governor's house below. At the place where this wall terminates, which is near the summit of the eminence, the side of the hill falls perpendicularly down into a deep gully, by which the fort is encompassed, and which might be the means of rendering this fortification unassailable, and a place that might long be maintained, were it not for other hills within musket-shot, which command every part of it. The space inclosed by the lower wall is about four hundred yards in length, and in some places about one hundred in breadth; here are the barracks for the troops, and at the upper end is a building, in which a court is held, for the regulation of the police of the town. A door, in that side of the wall which faces the market-place, is the only entrance, and leads by a winding stair-case to different parts of the fortification. There is one other fortification, about half a mile from the fort, situated on the west side of the bay, at the foot of a high hill, and but little elevated above the level of the sea. This shews a face of five embrasures to the east, and in that direction commands the west side of the bay three embrasures to the northward are so disposed, as to be able to open upon any vessel the instant she passes round the point of Angels; whilst two others to the southward, command the ships lying in the harbour or the bay. We computed that these several places contained about seventy pieces of cannon, many of which were without proper carriages, and some were lying dismounted under the walls of the lower battery in the town.

From the western fort some rocks extend into the bay, and the bottom is too foul for vessels of any force to anchor nearer to this fortification than about four hundred yards; but they may approach and anchor in a very eligible situation, within about two hundred and fifty yards of the garrison or principal fortress; and neither of these places, in their present situation, would be able to resist a well directed fire even from two or three frigates.

It appeared to us to be very extraordinary, that, under the existing circumstances of Europe, and during a war between Spain and France, the fortifications at Valparaiso should remain in such a neglected, ruinous, and defenceless state, and that no measures should either be resorted to, or appear to be in contemplation, for putting them into a more respectable condition: especially as it is from this port that the kingdom of Peru principally depends for its supply of grain; in return for which sugar, tobacco, indigo, and spirits, are imported into Valparaiso. Tar we found not only to be a very scarce but dear article, as the expence of the quantity which was necessary for our new cables, was nearly equal to that of the workmanship and raw material of which they were composed.

The houses in Valparaiso, on account of the earthquakes which frequently happen in South America, like those at St. Jago, consist of the ground floor only; the walls are built with mud, and plastered over with a preparation of lime; they are convenient, well adapted to the climate, and are in general handsomely furnished. In the town and in the village of Almandrel there are six churches, within the diocese of the archbishop of St. Jago, but under the direction of a vicar, who resides at Valparaiso, and is amenable for his conduct to the archbishop. The town and its neighbourhood are under the jurisdiction of the governor, who receives his appointment, with a salary of four thousand dollars per annum, from the king of Spain; but he is nevertheless under the immediate orders and controul of the Captain-General. All civil and military causes are heard at St. Jago. Capital offences are seldom committed; a man was found guilty on a charge of felony, and hanged about three years before our arrival, a punishment that, we understood, was seldom known to be inflicted.

I could not ascertain what were the revenues of the king of Spain on the exports and imports at Valparaiso, the collection of which is an important part of the governor's business: nor was I able to satisfy myself as to the amount of dollars which are annually sent from this port to Old Spain, but I had reason to believe it was not less than one million and an half. The

quantity of gold and silver coined into money at Mexico is prodigious; I obtained an account of the coinage there, from the 1st of January to the 31st of December, 1793, by which it appeared that the total amount was as under:

In gold.	In silver.	Total.
pesos, or hard dollars,	pesos,	pesos,
884,262.	23,428,680.	24,312,942

This, however, was the greatest quantity of specie ever known in one year to have been coined in the money-house at Mexico.

In answer to a letter, which by the desire of Sen<sup>r</sup> Don Ambrosio I had written to him, acquainting him with our safe return to Valparaiso, he had the goodness to express the most serious concern for the decayed state in which I had the misfortune to find our main-yard; and in a letter to Governor Alava, he directed him to use his utmost endeavours to supply us with a new one, by searching amongst the traders in the port; and stating that he had understood from the ship Mercury, a main-yard for the Discovery might be procured. Although we could not on this occasion avail ourselves of the President's kind attention, yet these letters breathed not only so much friendliness and anxiety for the preservation of our little community, but exhibited such earnest solicitude for the safe return of our expedition to Europe, lest the important information we had to communicate should be lost to the world, that I cannot resist noticing this circumstance as an additional proof of the goodness and magnanimity of his Excellency the President of Chili.

The wind, which had been generally in the southern quarter, blowing gently, and subsiding into a calm towards the evening of Thursday the 23d, changed to the north, and was accompanied by a very heavy rain, that continued with little intermission all the following day, Friday the 24th. After the rain ceased, the weather was cloudy and unpleasant until Saturday the 25th, when the wind returned to the S. S. W. with fair and moderate weather, notwithstanding which the Chatham's small bower cable, in consequence of its being completely worn out, broke, which obliged Mr. Puget to warp the vessel nearer in shore, and to moor to an anchor on the beach; after which the anchor, with the remainder of the cable, was recovered. On the Monday following, (the 27th) the carpenters finished the main-yard, and it was got on board and rigged, the caulkers had nearly finished their business; and, as I was very anxious to take our departure, I gave orders for the observatory and instruments to be received on board, and the vessels to be made ready for proceeding to sea the first favorable

opportunity. It was not, however, until Tuesday the 5th of May, that we had sufficient wind to encourage us to unmoor, which was done about six in the morning, with a light breeze of wind from the south; but this soon dying away, we returned nearly to the place from whence we had come. On a fresh breeze springing up, about noon the next day, from the south and S. by W., we unmoored, and after saluting the fort with thirteen guns, (which were equally returned) and taking our leave of Governor Alava, and the rest of our very hospitable friends at Valparaiso, we made sail from the port, in company with the Chatham and a Spanish brig and schooner.

The trade of this port is carried on in ships from two hundred and fifty to seven hundred tons burthen; in which is annually exported to Lima about fifteen thousand tons of wheat and wheat flour, large quantities of small cordage, dried salt fish, and apples, pears, and peaches, in great abundance. All goods imported are landed on a soft sandy bank lying before the customhouse, and from thence carried into the warehouses, or removed to distant parts of the country on the backs of mules; by which conveyance the articles for exportation are in like manner brought down to the shore. Most kinds of vegetables, and a great variety of fruits, as well those of the northern parts of Europe, as those common in the tropical countries, were here procured in great plenty, were all excellent of their kinds, and were very cheap: the water was extremely good, though the mode of obtaining it was somewhat tedious, as we were obliged to fill our casks from pipes of a small bore, through which it was conducted from the reservoir in the market-place down to the water side. Although there was no perceptible current in the bay, the rise and fall of the tide was evidently about three feet.

## Astronomical and Nautical Observations.

On the 27th of March, 1795, Kendall's chronometer, according to the last rate, shewed

The true longitude, as ascertained at the observatory, by 39 sets of lunar distances, was 288° 28′ 52″.

By which it appears, that Kendall's chronometer was 42' 2"; Arnold's No. 14, 35' 17"; and Arnold's No. 176, 1° 58' 2" to the westward of true longitude.

By equal altitudes, taken on the 26th of April, 1795, Kendall's chronometer was found to be fast of mean time at Greenwich, on that day at noon,

	10 h	59	,	23	"	15	""
And to be gaining on mean time, per day, at the rate of				29		34	
Arnold's No. 14, fast of mean time, at Greenwich, ditto	6	15		10		15	
And to be gaining on mean time, per day, at the rate of				25		10	
Arnold's No. 176, fast of mean time at Greenwich, ditto	13	28		33		15	
And to be gaining on mean time, per day, at the rate of				58		57	
The latitude of the observatory, by twelve meridional altitudes of the sun was found to be	33 °	1	,	30	"		

The variation, by two different compasses, and by six sets of observations on each, 14° 49′ eastwardly.

The vertical inclination of the magnetic needle:

Marked end	North, face	East,	44 °	57 '
Ditto,	ditto,	West,	44	40
Ditto,	South, face	East,	43	45
Ditto,	ditto,	West,	43	40
Mean inclinate dipping no	44	15		

[4] Thirty-six quadras make a mile.

# CHAPTER VI.

Quit Valparaiso—Proceed to the Southward—Pass to the South of Cape Horn—Useless Search for the Isla Grande—Part Company with the Chatham—Arrive at St. Helena—Join the Chatham there—Leave St. Helena—Capture the Macassar Dutch East Indiaman—Proceed to the Northward—Discover a Number of Vessels under Convoy of his Majesty's Ship Sceptre—Join the Convoy, and proceed with it to the Shannon—Discovery proceeds from thence to the River Thames—Astronomical and Nautical Observations.

Having appointed with Mr. Puget our next rendezvous to be at St. Helena, with a fresh breeze varying between S. S. May 1795 W. and S. by E. we left the bay of Valparaiso, Thursday the 7th, and passed the point of Angels, steering to the W. S. W. The weather was clear and pleasant, yet a heavy swell from the S. S. W. indicated very boisterous weather in that quarter; the wind, however, continued to blow a gentle gale from the south-western quarter, with which we made considerable progress. From the extremely worn-out state of our sails, the foretopmast staysail split, and on a survey of our other sails and cables, we were under the necessity of condemning a best bower cable, a fore-topsail, and maintopmast staysail, which were unbent, and replaced by others that could scarcely be considered to be in a much more serviceable condition.

The observed latitude, on Saturday the 9th, was found to be 33° 21′ south, the longitude, by Arnold's chronometer, No. 14, 282° 5′; by No. 176, 282° 36′ 30″; by Kendall's, 282° 6′ 45″; and by the dead reckoning 282° 25′; the variation of the compass 13° 15′ eastwardly. The wind veered for a few hours to the north-west, and blew a fresh gale, with which we directed our course towards the S. S. E. until it returned to its former south-western quarter, when we should have been able to have made great progress to the southward, had we not been repeatedly under the necessity of shortening sail for the Chatham, which was far a-stern. Some petrels, and six or eight pintadoes, were seen about the ship on Tuesday the 12th, and two days afterwards several large albatrosses were observed at no great distance. The weather continued to be pleasant until Tuesday the 19th, when the wind changed to the north-west, and was attended by very thick disagreeable

squally weather. Our course was again directed to the S. S. E.; and it gave me concern that we were not able to avail ourselves of this favorable wind, without risking a separation from the Chatham; for, notwithstanding the additional quantity of ballast which she had taken on board at Valparaiso, she did not appear to be improved in her sailing: about noon her signal was made with a gun to make more sail. The wind increased from the west and north-west, accompanied by very heavy squalls of hail and rain; in the course of the night false fires were burnt, to denote our situation to our consort, and on the next forenoon, Wednesday the 20th, her signal was again repeated to make more sail; but as we still kept increasing our distance from her, about noon I ordered the mainsail to be hauled up, and a reef taken in each of the topsails. At this time, in latitude 50° 50' south; longitude, by Arnold's No. 14, 280° 33′ 45″; by No. 176, 281° 32′ 30″; by Kendall's chronometer 280° 25′ 30″; and by the dead reckoning 281° 11′; the variation of the compass was observed to be 17° eastwardly; and cape Noir to bear by compass, according to the Spanish charts, S. 42 E. distant 100 leagues, but, by our calculations, it bore by compass S. 46 E. and was at the distance of 107 leagues.

As we proceeded to the southward the weather gradually changed for the worse, and the wind, which, with little interruption, had hitherto been agreeable to our wishes, now became turbulent, and blew at times in very heavy squalls; in one of these, about three o'clock on Friday afternoon, the 22nd, we carried away the maintopsail sheet: this obliged us to take in the sail; on the gale increasing the fore-topsail was furled; and, fearful of any serious accident, either to our main-yard or mast, I directed the mainsail to be taken in, and the top-gallant yards and masts to be struck, in order that the weak parts might be strained as little as could be helped; about an hour afterwards, the starboard bumkin was also carried away, and the wind at W. S. W. continued to blow with great violence until midnight, when it became somewhat more moderate, and we were enabled to set the mainsail and storm staysail. False fires were burnt during the night as signals to the Chatham. Towards the next morning, Saturday the 23d, after lowering the topsails, and hauling up the mainsail, in a heavy squall of wind and hail, we wore the ship, to wait for our consort. In the afternoon, although the wind continued nearly from the same quarter, the weather became more moderate, and we were able to get up our top-gallant yards and masts, and to make the best of our way towards the south, directing our course as much to the eastward as the variation of the wind would permit. This favorable change, however, was not of long duration; for, in the afternoon of Monday the 25th, on the wind veering to the west and north-west, we were obliged to closereef the fore and maintopsails, and take in the mizentopsail. The gale continued to increase with so much violence, that, by seven o'clock on Tuesday morning the 26th, we were under the necessity of handing our topsails, and getting the top-gallant yards and masts down upon deck, to relieve the masts, and to make the ship as snug as possible. The observed latitude at noon was 56° 4' south; by Arnold's chronometer No. 14, the longitude appeared to be 285° 52′ 30″; by No. 176, 286° 55′; by Kendall's, 285° 32′ 15″; and by the dead reckoning 286° 33′. According to observations which had been procured in the two preceding days, it appeared, that the dead reckoning had erred thirteen miles in latitude, and twenty-five miles in longitude, the ship having been set so far to the north-eastward. The wind continued to blow very hard, varying between W. S. W. and W. N. W. until towards the evening, when it altered to the east, and E. S. E. brought with it a very heavy fall of snow, and blew so violently, that our weather maintopsail sheet gave way, and obliged us to take in the sail. About six o'clock the next morning, Wednesday the 27th, the wind again changed to the S. W. and the weather became sufficiently moderate and clear to get up top-gallant yards and masts, and to set our reefed topsails. Notwithstanding that at this time there was no great pressure on any part of the rigging, so extremely rotten and decayed were our principal ropes and sails, that our starboard maintopsail sheet broke, the gib-boom snapped short off about the middle, and the wind split the mizentopsail. Just before nine o'clock in the forenoon, an island was seen bearing by compass N. 15 W. which at first we supposed to be Diego Ramirez; but as that is represented by former navigators to be a single island in the latitude of 56° 38' south, longitude 291° 34′; as the land in sight soon put on the appearance of being much broken; as we had soundings about two in the afternoon at the distance of three leagues in the depth of eighty fathoms, in the latitude of 56° 28′ south, longitude 291° 23′; and as captain Cook had passed between the islands of St. Ildefonso and Tierra del Fuego, in the latitude of 55° 53' south, longitude 290° 19'; I had every reason to believe that we had been mistaken, and that the land we had seen at nine o'clock was St. Ildefonso's isles, which at this time bore by compass W. S. W. The wind was less boisterous on the succeeding day, Thursday the 28th, but the weather continued to be unpleasant, being very dark and gloomy, with frequent heavy showers of snow. About eleven o'clock at night, in a squall of hail, rain, and snow, the maintopsail was split and was replaced by another, which although whole and the best we had, was in a very unserviceable condition.

Notwithstanding the snow continued to fall so very heavily that no observation for the latitude could be procured, yet by four double altitudes

of the sun taken by two persons with different instruments, the latitude was found to be 56° 57′; the longitude carried on by the dead reckoning, and corrected by Arnold's chronometer No. 14, appeared to be 293° 39′, and the variation of the compass 23° eastwardly.

Considering that we were now sufficiently advanced to the southward to avoid any inconvenience or interruption from the islands which lie off cape Horn, I determined to shape such a course to the north-eastward, as we proceeded in our route to St. Helena, as might afford me an opportunity of seeing and determining the situation of the Isla Grande, the southern point of which is stated to be in latitude 45° 30′, longitude 313° 20′. On Friday the 30th we were again visited by strong gales and heavy squalls of wind from the west and north-western points, which frequently reduced us to our courses; as we proceeded towards the north-east, the latitude by an indifferent observation appeared to be 55° 28′, and the longitude at noon brought forward by Arnold's chronometer No. 14, was according to the dead reckoning 299° 9′.

On Monday the 1st of June, about six in the morning, I ordered the fore-topsail to be taken in, for the purpose of June 1795 allowing the Chatham to come up with us, as she was at this time far a-stern. At day-light the next morning, Tuesday the 2d, she was in sight from the main top, but not from the deck.

Our latitude on Thursday the 4th, by the dead reckoning since the preceding day being 46° 16′, and the longitude brought forward by Arnold's chronometer No. 14, 310° 8', it was reasonable to conclude, as we had a fresh breeze from the west and south-west, that we were approaching very rapidly towards Isla Grande; and as I was very solicitous to examine the space allotted to this island, I continued our course to the northward, that we might fall into its parallel some leagues to the westward of the spot assigned to it; but in the afternoon we were again visited by a very furious storm at first from the N. W. but soon afterwards from the S. W. which obliged us to steer to the eastward, under the foresail and close-reefed maintopsail on the cap, in order that we might keep a-head of the sea which ran excessively high, and broke with great violence. Under this reduced canvas, we outsailed the Chatham so much as to lose sight of her. The south-west gale continued to blow very hard until the morning of Friday the 5th, when it moderated, and was attended by clear, though severely cold weather. We now stood to the northward, and had the pleasure of rejoining the Chatham. At noon our observed latitude was 45° 30′, longitude 312° 55′; in this situation I esteemed it to be a very fortunate circumstance that the weather was fine, and that the horizon was remarkably clear in all directions, excepting between the N. W. and N. N. E.; so that had any land been above our horizon within the distance of from ten to twenty leagues, it could not possibly have escaped our notice. Between the limits above-mentioned, which were occupied by a haze, we could also have discerned land at the distance of five or six leagues, and as it was in this direction that we were steering, we must have fallen in with it had any land there existed. From noon our course was directed about N. by E. which by eight in the evening brought us to the latitude of 45° 4′, longitude 313° 3′. The weather continued to be tolerably clear until the close of the day, but no land was within our view, nor had we the least reason, from any of the usual indications, to suppose ourselves in its vicinity, excepting from the numbers of birds that were about the ship.

According to Mr. Arrowsmith's comprehensive chart, (in which the Isla Grande is placed agreeably to the assigned situation of it by Mr. Dalrymple,) the track of Dr. Halley is laid down about a degree to the westward of our path, crossing the same parallel in the longitude of about 311° 55'; from which circumstance it is probable, that those on board that vessel saw a considerable distance to the westward of them. Since therefore we met with no drift wood, nor other circumstance to indicate our vicinity to land; (and had any been near to us in a westwardly direction, such indications most likely would, from the generally prevailing winds, have been presented to us), I was led to conclude, that if M. La Roche did discover any island under the parallel of 45° south, that such land must have been to the eastward of our track. Under this persuasion, about eight in the evening, as the weather had the appearance of being fine, and the wind moderate, I steered a more eastwardly course, with an intention, should the winds prove favorable, to continue about this parallel until we should pass the meridian of South Georgia; from the shores of which island, it is with great reason supposed, La Roche steered to the north, and in that route fell in with Isla Grande. It is therefore most likely, that if any such land has existence, it will be found not very far remote from the situation assigned to it by Captain Cook; a fact I was very desirous of establishing.

On Saturday morning the 6th, although the weather was gloomy, with the wind from the north, yet it admitted of our seeing distinctly all around us for several leagues; we continued to stand to the eastward until four in the afternoon, when in latitude 45° 6′ south, longitude 314° 50′, the atmosphere was sufficiently clear to have seen any land above our horizon at the distance of six or eight leagues, but nothing of the kind was within the limits of our view. The wind now veered to the N. E. and east, and blew a fresh

gale, with which we stood to the north, in the night to the S. E. and on the following morning, Sunday the 7th, to the S. S. E. and south, so that we were unable to regain the parallel of 45° without employing more time than I had now to appropriate to this examination; being, from the extremely bad condition of our sails and rigging very anxious to lose no opportunity of making the best of our way to St. Helena; and for this reason I gave up all further thought of searching for Isla Grande, and continued our course towards the N. N. E.

This short investigation, however, will serve to shew that no such island exists in or about the latitude of 45° south, between the meridians 312° and 315° 20′ of east longitude; and that, as I have already mentioned, Dr. Halley most likely determined the same point, namely, that there was no such island, a degree further to the westward.

At midnight the Chatham was close along side of us, but by four o'clock the next morning, Monday the 8th, she was nearly out of sight astern of the Discovery, our mainsail and top-gallant sails were therefore taken in to wait for her nearer approach; at day-light she was seen about three miles a-stern, and having at this time a steady fresh gale with fair weather, her signal was made to make more sail, and repeated with a gun several times until about ten o'clock, when the Chatham neither making sail, nor exhibiting any reason indicative of her wanting assistance, I concluded that some cause of no very serious nature had retarded her progress; and just as we had set our studding-sails, I had the pleasure to see her employed in the same business also.

Shortly after noon the wind veered to the S. W. and having increased our distance from the Chatham very considerably, we shortened sail to wait for her coming up, concluding that she would soon overtake us under our then reduced quantity of canvas. In these expectations however we were disappointed; at ten at night the wind had again freshened from the N. N. W.; we now burnt a false fire to denote our situation to our consort, but this was not answered, and by two the next morning, Tuesday the 9th, the wind veered to the westward, and blew a very strong gale, during which, lest we should lose the Chatham, we hauled up the mainsail and close-reefed the topsails; but as at day-light she was not in sight from the mast-head, and as I did not know in what direction to search for her, I could not but consider the inferiority of her sailing had at length completed our separation, and in the hope that we should meet all well at St. Helena, our next rendezvous, we made the best of our way thither, by continuing our course to the northeastward. The observed latitude at noon was 36° 45′, longitude according to

Arnold's chronometer No. 14, 324° 43′, and the variation of the compass 6° eastwardly. The wind continued to blow very hard at times, attended by heavy rains, and thick cloudy squally weather, in which our sails frequently split, and our topsail sheets and other essential parts of the rigging gave way, until Saturday the 20th, when it became more moderate, and in latitude 34° 38′ south, longitude 347° 10′, brought forward by Arnold's chronometer No. 14, the ship appeared to have been set twenty-five miles of latitude towards the north, and thirty-four miles of longitude towards the east of the reckoning.

About half past five o'clock on Sunday morning the 21st, Richard Jones, one of the seamen, unfortunately fell overboard from the main chains and was drowned. The accident had no sooner happened than a grating was thrown overboard, and the ship was instantly hove to, for the purpose of affording him every assistance; but this was to no effect, for the poor fellow sunk immediately, and was never more seen. By this melancholy event the service lost a very able seaman, and his comrades a good member of their society. On the following day at noon, Monday the 22d, in latitude 32° 3' south, longitude 351° 15', it appeared that the ship was nine miles of latitude to the northward, and twenty-five miles of longitude to the eastward of our reckoning; and that the variation of the compass by two sets of azimuths was now 11° 20' westwardly. The eastwardly variation seemed to have ceased about the 16th of June, as in latitude 35° 43' south, longitude 232° 5', it had decreased to 16', and since that period the westerly variation had been gradually increasing as we proceeded to the northward.

No circumstances of importance, or such as are worthy to be recorded, took place, until about two o'clock in the July 1795 afternoon of Thursday the 2d of July, when after experiencing tolerably pleasant weather for the preceding ten days, the island of St. Helena was discovered bearing by compass N. by E.; about eight in the evening we shortened sail, and hauled our wind on the starboard tack, as the island now extended by compass from N. 3 W. to N. 35 W. at the distance of about five leagues; at day-light the next morning, Friday the 3d, we made sail for St. Helena bay, and about six o'clock we had the happiness of discovering the Chatham in the south-eastern quarter. As we were now fast approaching a port from whence it was reasonable to expect that opportunities would frequently occur, during the time of our re-equipment there, to communicate with our friends in England, I deemed it expedient that the order should be publicly read, which I had received from the Lords of the Admiralty, directing me to demand the log-books and journals which had been kept, and the charts, drawings, &c. which had been executed by the officers, petty-officers, and gentlemen on board the Discovery; and directing also, that I should enjoin them and the whole of the crew not to divulge where they had been, until they should have permission so to do: and a copy of this order was sent to Mr. Puget, with my directions to enforce the same on board the Chatham also.

As we approached the bay of St. Helena, I had the mortification to see a fleet of large ships standing out, and apparently bound to the northward. This fleet I considered to be from the East Indies, and that it was most probably bound to England, under the protection of which I should have been happy to have performed the remainder of our voyage; for we were in no situation to contend with the enemy's ships of equal force, nor to have escaped from those of superior weight of metal. At half past eight o'clock we anchored in 16 fathoms water, and moored with a cable each way. In the bay of St. Helena we found the Arniston East Indiaman, and an American brig. After saluting the fort with thirteen guns, which were returned, accompanied by Mr. Puget, I paid my compliments to the governor, and understood from him, that the fleet of ships which we had seen depart from the island as we had approached it in the morning, was, as I had imagined, a fleet of East Indiamen, together with several sail of Dutch prizes under the convoy of His Majesty's ship Sceptre, commanded by Captain Essington.

I was received by the governor of St. Helena with his accustomed politeness, and having understood from him that hostilities had taken place between the Court of London, and the United States of Holland, I sent an officer on board a Dutch East Indiaman which I had perceived to be coming into the bay, and took possession of her as a prize.

The great plenty of excellent refreshments with which we had been supplied during our residence amongst our very hospitable friends at Valparaiso, had not only eradicated every appearance of the scurvy before our departure from that port, but had so completely re-established the health of every individual on board (myself excepted) that although we had now been fifty-eight days at sea, during which time we had experienced much bad weather, particularly in that part of the passage as we had approached the western coast of Patagonia, and until we had passed round cape Horn and proceeded some distance to the north-eastward; and had also been obliged to make great exertions, and to endure great fatigue, owing to the repeated accidents that had befallen our sails and rigging, and the additional labour at the pumps consequent on the leak in the fore part of the vessel; I had the inexpressible happiness of seeing all my officers and men return to a British settlement, after an absence from England of more than four years

and a quarter, perfectly well in health, and with constitutions apparently unimpaired by the extremely laborious service in which they had been so long employed, and to which without a murmur they had, at all times, and in all weather, uniformly submitted with great zeal and alacrity.

Notwithstanding that I had the additional satisfaction to hear, from Mr. Puget, that the crew of the Chatham were now in a convalescent state, yet I was much concerned to become acquainted that their health, as well as that of the officers, had suffered very materially indeed in their late passage from Valparaiso. Although, previously to our departure from that port, every precaution within our power had been taken to make both vessels as equal as it were possible to the task which they had to perform at the then advanced season of the year, through so tempestuous and inhospitable a region; yet the smallness of the Chatham had made her more liable to the influence of the bad weather than the Discovery, and this will serve to account for her progress having been so very frequently interrupted. For sixteen days together Mr. Puget had been under the necessity of keeping in the dead lights, and from the violence of her motion her decks and sides had become open and so leaky, that his people were constantly in a wet humid state when they retired from the deck, on which, previously to their making cape Horn, five men only in a watch were able to do duty; the rest being rendered incapable of it by rheumatic complaints. Vessels of the Chatham's size should certainly make choice of the summer season to insure a good passage round the southern promontory of America; for although the prevailing winds in the winter months of May, June, and July, may expedite their voyage, yet this advantage is more than counter-balanced by the shortness of the days, the severity of the climate, and the very stormy weather which is attendant on this time of the year; this Mr. Puget represented as having had the effect of keeping the Chatham, comparatively speaking, almost under water during the greater part of the passage, in which he stated, that nothing of importance had occurred since the period of our separation, and that the reason why our last signals were not answered on the night of the 8th of June, was, that the supply of false fire on board the Chatham was at that time totally expended. From Mr. Puget I also understood, that in and about the latitude assigned to La Roche's isla Grande, the Chatham, like the Discovery, had been visited by a great number of birds, which, with some sea weed, were the only indications he had noticed of the vicinity of land.

My first care was to take such precautions on our arrival at St. Helena, as were most likely to prove efficacious in preserving to the crews of both vessels that inestimable blessing, health, of which, on board the Discovery, we were in such complete enjoyment. For this purpose some fresh

provisions were procured from the island, and occasionally served to both ship's companies, with a plentiful supply of esculent vegetables; the convalescents from the Chatham were sent on shore, and such regulations were adopted as appeared to be, in my judgment, most likely to insure this desirable object; which, at all times, and on all occasions, throughout the voyage, had been a consideration with me of the first necessity and highest importance.

After these arrangements were made, the observatory, as usual, was committed to the charge of Mr. Whidbey; and now that the ship was stationary, the carpenters were employed in searching for the leak in the fore part of the vessel, which, at times, during our late passage from Valparaiso, had greatly increased our labours, by our efforts to keep the ship free from the great quantity of water which it admitted. Notwithstanding that our main-yard had, by great care and attention, brought us safely thus far, yet, as I found it would be possible to procure a new one at St. Helena, measures were instantly taken for replacing it with one, on which we could more securely depend; whilst other parts of the crew were employed in the necessary duties about the ship, and in obtaining a full supply of water.

According to our reckoning, this day was *Monday the 6th of July*, but at St. Helena we found it (agreeably to our calculations) to be only Sunday the 5th of July: for, by our having sailed round the world, in an eastern direction, we had, since our departure from England, gained *one day*; but as it was now become expedient that we should subscribe to the estimation of time, as understood by Europeans and the rest of the civilized world, to which we were now fast approaching, our former reckoning was abandoned, the day we had gained dropped, and after noon this day, we recommenced *Sunday the 5th of July*.

His Majesty's ship the Sphinx, commanded by Captain Brisac, arrived on Tuesday, charged with dispatches from Admiral Sir George Keith Elphinstone, (now Lord Keith,) to General Clarke at St. Salvador, on the coast of Brasil, who, with his army, was waiting at that port, until he should receive instructions from Sir George that might enable him to co-operate with that admiral in the reduction of the cape of Good Hope. A convoy, I understood, was soon expected to sail from St. Salvador, and as I had reason to believe the Chatham's re-equipment would not take more than a week, I determined to send her thither for the purpose of going with the first convoy which should sail from thence to England, and that I would be content to remain here until some British vessel of force should touch at St. Helena in her way home, or that the next convoy from the East Indies should arrive,

under the protection of which, I should hope safely to arrive in England in the course of the autumn. As the service which Captain Brisac had to perform required the utmost dispatch, our boats assisted those of the Sphinx in recruiting her water, after which, on the following day, Tuesday the 7th, she immediately sailed for the coast of Brasil.

Understanding that our field pieces would be of use to His Majesty's forces on the coast of Africa, and considering that the purpose for which they had originally been put on board the Discovery was now completely served, and that they could not be of the least possible service to us in performing the remainder of our voyage to England, I availed myself of the Arniston being engaged to carry troops from St. Helena to the squadron under Admiral Sir George Keith Elphinstone, to consign, by that conveyance, the four pieces of ordnance, and the remaining parts of the ammunition we had on board, to the commanding officer of the expedition destined against the cape of Good Hope; and, on Friday the 10th, I was made happy on this occasion to have it also in my power to assist with our boats in the embarkation of the troops on board the Arniston.

The leak was soon discovered to be in the bows of the Discovery, and our carpenters were immediately employed in using their best endeavours to stop and prevent any further inconvenience from it.

On Sunday morning arrived the Orpheus of London, commanded by Mr. Bowen, to whom were entrusted duplicates of those dispatches from Admiral Sir George Keith Elphinstone, with which Captain Brisac had sailed on the 8th, with directions to the governor of St. Helena to use his utmost endeavours to forward them immediately to General Clarke at St. Salvador. The Chatham at this time being nearly ready for sea, I considered that it would be furthering his Majesty's service to charge Mr. Puget with the care of these duplicate dispatches, with which, after receiving the following order from me, he departed for the coast of Brasil the following day, Monday the 13th.

"Considering it to be expedient, and for the good of His Majesty's service, that you should proceed immediately to St. Salvador, in order to carry some dispatches from Rear Admiral the Honourable Sir George Keith Elphinstone, to Major-General Clarke, commander of his Majesty's forces, destined to act with the said rear admiral; and the said major-general having been directed to rendezvous at St. Salvador; you are hereby required and directed to proceed, without loss of time, to the said port, in

order to deliver the inclosed dispatches accordingly; and, after having performed that service, you will communicate to the commanding officer of his Majesty's naval forces at that port, the nature of the service on which you have been employed, and that you have my directions, after delivering the said dispatches, to use your utmost exertions, for the purpose of immediately proceeding to England, that you may be enabled to carry into effect such further orders as you have received from me. But should you not meet with any naval officer, senior to yourself, at that port, you will inform Major-General Clarke, that I conceive it to be a matter of great moment, that as little detention as possible should take place to retard your proceeding to England, as before expressed. If, before your arrival at the port of St. Salvador, the said troops and squadron should have departed, you are to use the utmost precaution not to promulgate the cause which carried you thither, but having, with all expedition, completed your water, &c. &c. you are to proceed to England as already directed: and, as it is of the utmost importance to prevent these orders, dispatches, and private signals, from falling into the hands of the enemy, you are to keep the same in a leaden box, in order that they may be thrown into the sea, in case of capture. And that you may avoid, as much as possible, falling in with the enemy's cruizers, on your approaching the coast of Europe, you will consider, circumstances may point out, of the propriety of proceeding round the north part of Ireland, either to the first convenient port on the coast of Scotland or England, which you can make; from whence you will immediately repair to the Admiralty office, and there deliver the dispatches with which you are charged.

"But in the event of your reaching St. Salvador before General Clarke should have arrived, and finding no other British officer there with whom you may judge it proper to entrust the dispatches committed to your care; you are to continue there fourteen days, and after the expiration of that time you are to proceed as herein before directed; for which this shall be your order. Dated on board his Majesty's sloop Discovery, in St. Helena bay, this 12th of July, 1795.

GEORGE VANCOUVER."

To Lieutenant Peter Puget, commanding His Majesty's armed tender Chatham."

Previously to Mr. Puget's departure from St. Helena, we were given to understand, by Mr. Bowen, that it had been decreed, by the national assembly of France, that the Discovery and Chatham should pass the seas unmolested by the French cruizers, notwithstanding the existing war between the two countries. This agreeable intelligence induced me to alter the plan which I had formed of waiting at this island for convoy. The East India ships, under the protection of the Sceptre, had not yet been sailed so long from St. Helena, as to divest me intirely of the hope that we might overtake them, before they should have reached those latitudes in which we should be likely to meet with any thing unpleasant from the enemy's ships of force, in consequence of their commanders being unacquainted with the national decree in our favor, or in the event of any new matter having arisen between the powers at war to cause its being revoked. Every effort was therefore now made to expedite our re-equipment; the main-yard, by the assistance of the carpenters belonging to the Arniston, was likely to be ready in the course of a day or two, in which time, I had reason to believe, our own artificers would have stopped the leak in the ship's bows; and as I entertained hopes that, soon after this service should be performed, the Discovery would, in all other respects, be fit for sea, I determined to sail immediately, and not to wait for the uncertain arrival of any other vessel, which might afford us protection during the remainder of our voyage to England.

The supply of vegetables which St. Helena afforded us was very ample; but fruits of all kinds were found to be extremely scarce, owing to the want of rain. So severe and continued had been the drought for the three preceding years, that most of the trees, which were not indigenous to the country, had withered and fallen into decay, and amongst the exotics that had died were six plants of the bread fruit, which had been left by Captain Bligh on his return in the Providence from the islands in the Pacific Ocean. The loss of these valuable plants was very much regretted, as they appeared to thrive, and it was hoped, would have come to perfection. The herbage had suffered also in the same proportion, and, in the course of the period above mentioned, upwards of sixteen hundred head of cattle had died upon the island. The sheep were very lean and poor, and the quantity of fresh provisions that could be obtained was by no means equal to the supply I could have wished to have procured.

On Tuesday the 14th I had the pleasure to behold our new main-yard in such a state of forwardness that it would be ready to be got on board and rigged the following day, and I had the additional satisfaction of seeing, that by the unremitted attention of the respective officers who had the

superintendance of the several services which had become necessary to be carried into effect, little else now remained to be done than to prepare the vessel for our departure.

Much of my time, since our arrival at St. Helena, had been employed about the concerns of the Dutch prize Macassar, and in making the best arrangements within my power, to secure a safe passage for her to England. The ship was in a very bad leaky condition, and although we were able to give her some repair, yet it was totally out of our power to refit her, and put her in a proper state for so long a voyage, especially as there was little chance of her reaching any British port before the commencement of the winter.

Having, from long experience, been convinced of the skill and resources which Lieutenant Johnstone possessed, and which, on many trying occasions throughout the voyage, he had eminently displayed, I derived great satisfaction in committing the charge of the Macassar to his care. For this especial purpose he received my directions to quit the Chatham previously to her departure for St. Salvador; and in addition to the people that were to be engaged at St. Helena, to navigate the prize home, I spared, from the crew of the Discovery, seventeen able seamen, on whose exertions I could with confidence rely, to carry Mr. Johnstone's orders, with promptitude, into effect. With this supply of men on whom he could depend, and with the kind assurances which I received from Governor Brooke, that no assistance in his power should be wanting in the manning and reequipment of the prize, I entertained great hope that, under the protection of the first convoy that should arrive at St. Helena bound to England, little danger was to be apprehended of the Macassar's safe arrival, in some port of Great Britain.

In the bay of St. Helena, on the 4th of July, the chronometers shewed the following longitudes:

Arnold's	No. 14,	354	0	1	′	35	"
Ditto,	176,	355		20		5	
Kendall's,		352		35		5	
The true long	itude,	354		11		0	

By which it appeared that Arnold's chronometer, No. 14, was 9' 25", and Kendall's 1° 35' 25" to the westward, and that Arnold's No. 176 was 1° 9' 5"

to the eastward of the true longitude: and, by altitudes taken on this day, the 14th of July, Arnold's No. 14 was found at noon to be slow of mean time

At Greenwich,	17 h	10 ′	42 "	50 ‴
And to be gaining on mean time, per day, at the rate of			24	50
Arnold's No. 176, slow of mean time at Greenwich,	9	18	29	50
And to be gaining on mean time, per day, at the rate of			57	
Kendall's slow of mean time at Greenwich	12	15	3	20
And to be gaining on mean time, per day, at the rate of			28	22

On Wednesday the 15th I had the pleasure of receiving our new main-yard on board, it was immediately rigged, and the ship in every other respect made ready to proceed to sea. After paying my respects to the governor, and returning him my best thanks for his hospitality and obliging attention to the necessities of our little community whilst at St. Helena, I left Lieutenant Johnston on board the Macassar, with full directions in writing, by which he would be enabled to govern himself in conducting the vessel, of which he was put in charge to England, and about six o'clock on the following evening, with a light breeze of wind from the S. E. we directed our course to the north-westward, anxiously looking forward to that happy hour which should once more land us amongst our respective friends, from whose society we had suffered so long and so painful an absence.

The weather continued to be very pleasant, and we made great progress to the north-westward. On Saturday the 25th we crossed the equator in longitude 21° 35′ west from Greenwich, where the variation, by two sets of azimuths, was found to be 9° 20′ westwardly. From this time nothing occurred worthy of remark until Wednesday the 5th August 1795 of August; when one of the Cape de Verd islands was seen, bearing by compass N. 16 E. The weather had continued to be very pleasant, and although the winds, since the conclusion of the preceding month, had veered from the south-eastern to the west and north-western quarters, yet we

had not been prevented from making our north-western course good, agreeably to my wishes.

Our people, ever since our departure from St. Helena, had been occasionally employed in mending the sails and rigging, and, on all suitable opportunities, they had exercised with the great guns and small arms; whilst the extremely pleasant weather which had attended us, had greatly contributed to our becoming well acquainted with the management of both.

About four o'clock in the afternoon of Thursday the 20th, three vessels were discovered to the northward, and at eight in the evening eight sail were seen from the mast-head, bearing by compass N. 80 W. All our canvass was immediately spread, in the hope of our being able to overtake them; being in great hopes that the vessels in sight would prove to be the convoy which had left the bay of St. Helena on the morning of our arrival there; in the event of which, I should be happy to avail myself of the protection we should derive by accompanying so strong a fleet to England. At day-light the next morning, Friday the 21st, five ships only were in sight from the mast-head, but at seven in the morning nine sail of large vessels were so clearly discerned as to leave in my mind no doubt of their being a part of the fleet for which we had kept such an anxious, though hitherto unsuccessful, look out, under convoy of his Majesty's ship Sceptre, commanded by Captain Essington. About five in the afternoon a boat, from the General Goddard East Indiaman, came on board, and confirmed us in the opinion we had at first formed, and which every hour since had served to strengthen, that the fleet before us was a convoy consisting of twenty-four sail of Indiamen, under the protection of the Sceptre. Upon receiving this information, I ordered a boat to be hoisted out, and I waited upon Captain Essington, by whom I was received with that unaffected hearty welcome, and unreserved sincerity, which are known by every one who has the happiness of his friendship, to be the true type of his valuable character.

After putting myself under Captain Essington's orders, and receiving such instructions as were deemed to be necessary by him, for the regulation of his Majesty's sloop under my command, now attached to the fleet which he was convoying to England; I repaired on board the Discovery, and by spreading an additional quantity of canvass, we soon had the pleasure of joining company with the Sceptre.

The satisfaction I experienced, in the protection we had derived by overtaking and uniting our little force with so powerful a fleet, was greatly increased by my now understanding from Captain Essington, that he was of opinion the agreeable tidings communicated to me at St. Helena, by Mr.

Bowen, of a French decree having passed the national assembly, in favor of the Discovery and Chatham, was premature, and that, in the event of our having unfortunately met with an enemy of superior force, to whom of necessity we must have yielded, we should have had little chance of escaping the horrors of a French prison, in addition to the cruel mortification of losing to our country much of the information which had been collected during the voyage. This reflection had the effect of reconciling my mind to the slow progress which I was now well aware would necessarily be attendant on the conclusive part of our passage to England. Having been so fortunate hitherto, as to have lost only one man out of both vessels in consequence of disease, and as few by accidents as I could reasonably have expected, when I duly considered the length of our absence from home, and the nature of the service on which we had been so long employed; I do confess that, under the peculiar circumstances of our defenceless situation, I should have regarded it as a very painful task to have been compelled to the necessity of exposing my excellent officers and valuable crew, who were now, comparatively speaking, almost within reach of the welcome embraces of their nearest and dearest affections, to a conflict with an enemy, whose superiority in point of force we had not originally been fitted out to meet, nor were we but in a very humble way prepared to resist, and from whom, in point of sailing, when I adverted to the shattered condition of our masts and rigging, I entertained no hope of our being able to escape. I was, therefore, reconciled to the delays unavoidable in escorts of this nature, though they became greatly augmented by the deplorable condition of many of Captain Essington's Dutch prizes, some of which, I understood, had been with great difficulty prevented from foundering.

Although our progress was necessarily much retarded, yet our time passed pleasantly away, by having at length regained the power of devoting it, on all suitable occasions, to the comforts of a friendly intercourse with our surrounding countrymen, from the pleasures of whose society we had been so long estranged.

Nothing very material occurred until Tuesday, 1st of September; when, after contending with a fresh gale from the September north and north-western quarters, which had commenced the preceding day, and had been attended with some heavy squalls of wind and rain; about nine o'clock in the forenoon, in about the latitude of 46° 12′ north, longitude 29° 32′ west, one of the Dutch prizes made a signal of distress: we immediately hove to, and I sent the cutter to her assistance, but she was found to be almost a wreck, and in such a deplorably bad condition that it was impossible to save her, and she was therefore abandoned, by

order of Captain Essington, and set on fire about six o'clock in the evening. After performing this service our cutter returned to the ship, and in the act of hoisting her on board she was by accident stove intirely to pieces.

I do not recollect that my feelings ever suffered so much on any occasion of a similar nature, as at this moment. The cutter was the boat I had constantly used; in her I had travelled very many miles; in her I had repeatedly escaped from danger; she had always brought me safely home; and, although she was but an inanimate conveniency, to which, it may possibly be thought, no affection could be attached, yet I felt myself under such obligation for her services, that when she was dashed to pieces before my eyes, an involuntary emotion suddenly seized my breast, and I was compelled to turn away to hide a weakness (for which, though my own gratitude might find an apology) I should have thought improper to have publicly manifested.

The wind changed on Saturday the 5th, from the north-west to the opposite quarter, and blew a very hard gale, with squalls chiefly from E. by S. about six in the evening another of the Dutch prizes was observed to have made the signal of distress. We were directed to give her assistance; and the relief we were enabled to afford her was very salutary, and had become essentially necessary, as we found her in a very leaky state, and her crew in a very disabled sickly condition. The wind again veered to its former direction, and though it continued to be squally and unpleasant, it had been more moderate during the two last days; in one of these from the north-west, on Tuesday morning the 8th, about seven o'clock, we sprung our maintopmast, an accident that might have been attended with the most serious consequences, had we not been in a situation that afforded us the most ample protection, and which I had no doubt we should be able to maintain until we should arrive in some port of Great Britain, although our quantity of canvass should hereafter be materially reduced, as we had been repeatedly obliged to shorten sail for the convoy. All the upper sails were taken in, the mast struck, and the carpenters immediately employed to remedy and provide for the disaster in the best manner we were able; this business was completed about noon, and a topmast with the top-gallant rigging was again set up. Notwithstanding that the weather was not very favorable to astronomical pursuits, Mr. Whidbey procured six sets, and Mr. Orchard three sets of lunar distances, by the mean result of which the true longitude, at noon, was found

to be			20 °	13	′ 0	"	west
By Arnold's	chronometer,	No. 14,	20	14	5		west
	Ditto,	176,	19	48	30		west
By Kendall's,			20	6	30		west
The observed l	atitude		51	2	0		
Variation of the	e compass,		22 w	ester	ly.		

By our course having judiciously been directed far to the westward, it was most probable that the coast of Ireland would be the first land in the British dominions with which we should fall in. For those shores, as the wind and other circumstances had allowed, we had been steering for several days, and as our distance from England every day and every hour decreased, so our happiness became augmented in the grateful anticipation of once more breathing our native air, once more reposing in the bosom of our country and expecting friends. Every breast, as may be naturally imagined, was alive to sensations of the most pleasant nature, inseparable from the fond idea of returning home, after so long an absence, in an adventurous service to promote the general good, when unappalled by the consciousness of deserved reproach. In the midst of these agreeable reflections, however, presages of a melancholy cast would frequently obtrude upon the mind, and damp the promised joys in contemplation. Few of us had been blessed with any tidings from our families or friends since our last separation from them; and in the course of such a lapse of time what changes might not have taken place, what events might not have happened to disappoint our hopes; rob us of our present peace; or cloud the sunshine of our future days! These were considerations of a most painful nature, and tinged our joyful expectations with solicitude and apprehension!

At length, about five o'clock on Saturday morning the 12th, a signal was made by one of the headmost ships, that denoted she was within sight of land, and soon afterwards, from our mast-head, the glad tidings were announced that land was plainly to be seen, bearing by compass E. S. E. At eleven in the forenoon it was known to be the western coast of Ireland, and arrangements were immediately made by the Sceptre for keeping the ships together, and for entering the Shannon; where Captain Essington proposed to remain with his convoy until a force more equal to the protection of the valuable fleet he had thus safely brought into his Majesty's dominions, should arrive, to escort it from thence to England. Having communicated to

Captain Essington such parts of my orders from the Lords of the Admiralty, under which I had sailed, as applied to the government of my conduct on the present occasion, I received his orders to repair immediately to London; and the following day, Sunday the 13th, after having seen the Discovery safely moored, with the rest of the fleet, in the Shannon, and giving such instructions, as circumstances demanded, to my first lieutenant Mr. Baker, in whose zeal for the service, and abilities as an officer, a long experience justified me in implicitly confiding; I resigned my command of the Discovery into his hands, and with such books, papers and charts as had been previously selected, as being essential to the illustration of the services we had performed, I took leave of my officers and crew; not, however, without emotions which, though natural, on parting with a society with whom I had lived so long, shared so many dangers, and from whom I had received such essential services, are yet more easily to be imagined than I have the power to describe: and in the course of a few days I arrived at the Admiralty, where I deposited my several documents.

Before I bid farewell to the Discovery, [5] I must beg leave to arrest the attention of my readers for a few minutes, for the purpose of taking a short view of the geographical knowledge which had been obtained of the earth, previously to the expedition which I have had the honour to command, and the happiness of bringing thus to a conclusion; and also to notice such parts of the globe as yet remain to be explored to make that species of information complete. The effecting a passage into the oriental seas round the cape of Good Hope, the discovery of America, and the opening of a communication between the Atlantic and Pacific Oceans, by passing either through the straits of Magellan, or round the islands lying off the southern extremity of Tierra del Fuego, engaged the minds and utmost exertions of the most illustrious navigators during the three last centuries. These enterprises have been duly appreciated and justly celebrated for the important lights they have thrown upon the sciences of geography and nautical astronomy; for the improvements they have caused in the arts; for the commercial intercourse which, by their means, has been opened and established with all the maritime parts of the world; and, lastly, for the happy introduction of civilization amongst numerous tribes of our fellow creatures.

In the first attempts to accomplish these extensive objects, Great Britain took no part; but no sooner did she perceive the importance of which they were likely to be to her consequence and prosperity as a maritime state, than her spirit for the attainment of such valuable acquisitions to science became roused. In the course of a very few years, no such essential benefits have been secured to mankind, nor has so much geographical knowledge been

acquired, as since the commencement of DISCOVERY undertaken, and successfully accomplished, by the unremitted labours of British navigators; whose primary considerations have been to direct their inquiries to objects of an useful nature, and to investigate and support the truth, by a plain narrative of those facts, which fell within the sphere of their observation, rather than to give encouragement, by the obtrusion of specious opinions, to hypotheses, however ingenious. In consequence of a strict adherence to this principle, the geography of the earth is now placed beyond the influence of conjecture, and is determined by such incontrovertible evidence, that the small spaces that yet remain unexplored in the Pacific or Indian oceans are too insignificant to become an object of enterprise: there are, however, parts of the coasts, both of Asia and America, which would yet afford employment for the labourers in the science of DISCOVERY.

The Asiatic coast, from the latitude of about 35° to the latitude of 52° north is at present very ill defined; and the American coast, from about the latitude of 44° south, to the southern extremity of Tierra del Fuego, is likewise very little known; and I entertain no doubt, had not our late examination on the coast of North-West America, so delayed our return to the southern hemisphere, as to prevent my carrying the orders I had received into effect, that I should have derived great satisfaction from a survey and investigation of the shores of that interesting country. If, however, by that portion of his Majesty's commands, which I have had the honour to execute, it shall appear that a decision may as justly now take place, respecting any navigable communication between the waters of the Pacific and Atlantic oceans, within the limits of our survey, as on the hypothesis which gave as a counterpoise to the globe a southern continent, and which the indefatigable diligence of Captain Cook completely subverted, I should hope that the purpose for which his Majesty commanded the expedition to be undertaken, will not be considered as having failed for want of zeal or perseverance, though it should hereafter be found incomplete for want of judgment and ability.

There were few objects to which I had paid more attention, or had more sincerely at heart, than that of observing such a conduct, at all times, towards the several tribes of Indians, with whom we should frequently meet, as should prevent the necessity of our resorting to any measures that might endanger the lives of a people, whose *real* intentions were always likely to be misunderstood, from a want of knowledge in us of their respective dialects or languages. After having resided, as it were, amongst them for more than two years, without having had the least occasion to fire a shot in anger, I had fondly hoped that I should have been enabled to have completed

our researches in those before untrodden regions, without the loss of life to a single individual belonging to the countries we might yet find it necessary to visit. In this my anxious concern for the great cause of humanity I was, however, disappointed. The number of Indians from Traitor's cove which fell in the unprovoked attack upon our boats, on the 12th of August, 1793, could not be ascertained; but, independently of this unfortunate affair, I do not know of more than two men who afterwards lost their lives in consequence of our expeditions, from the Discovery or Chatham. These unlucky events did not, however, fail to produce in my mind much sorrow and regret, from which I could find no relief but in the consoling reflection, that nothing but the most urgent necessity, for our own preservation, would have compelled us to have adopted coercive measures.

From the first moment of my appointment, to the hour in which I resigned the station I had so long held, the health of every individual under my command had been my first care; and I had now the unspeakable happiness of beholding the same persons return on board the Discovery to the river Shannon, in perfect health, as had sailed with me from the river Thames, excepting such of the officers as had officially been sent home, or had been promoted in the Chatham; the seventeen seamen left at St. Helena, to assist in navigating the Macassar to England<sup>[6]</sup>, and the undermentioned individuals, who were unhappily lost in the course of the expedition.

John Brown, carpenter's mate, drowned by accident, in the execution of his duty, off the south Foreland, 3d of February, 1791.

Neil Coil, marine, died of the flux, communicated to the Discovery, at the cape of Good Hope, by an infected ship from Batavia, 7th of August, 1791.

Joseph Murgatroyd, one of the carpenter's crew, missing at sea the 21st of January, 1793.

John Carter, seaman, poisoned by eating muscles, in Poison cove, 15th June, 1793.

Isaac Wooden, drowned by accident, in the execution of his duty, off Wooden's rock, the 24th of August, 1794.

Richard Jones, drowned by accident, in the execution of his duty, between the port of Valparaiso and the island of St. Helena, 21st of June, 1795.

By this list it will appear that, from the 15th of December, in the year 1790, to this 13th day of September, 1795, comprehending a space of four years eight months and twenty-nine days, we had lost out of our complement of one hundred men, only one man by disease: and at the time of our parting with the Chatham<sup>[7]</sup> at St. Helena, she had not, in the course of the whole voyage lost a single man, either in consequence of ill health, or from any accident whatever.

The unfortunate loss of these five men from the Discovery produced in me infinite regret, but when I adverted to the very dangerous service in which we had been so long employed, and the many perilous situations from which we had providentially been extricated, with all possible adoration, humility, and gratitude, I offered up my unfeigned thanks to the Great Disposer of all human events, for the protection which thus, in his unbounded wisdom and goodness he had been pleased, on all occasions, to vouchsafe unto us, and which had now happily restored us to our country, our families, and our friends.

## END OF THE JOURNAL.

- [5] Arrived all well in the Thames the 20th of October, 1795.
- [6] Arrived all well the 22d of November, 1795.
- Arrived all well 17th of October, 1795.

# NOTES AND MISCELLANEOUS OBSERVATIONS.

Since my return to England I have had several conversations with Captain Colnett, relative to the capture of his vessel at Nootka, and the treatment that himself, officers, and crew, received from the Spaniards during the time they remained at that place, and afterwards whilst they were prisoners at St. Blas; from the whole of which it will appear, that he had been extremely ill used, and that no dependence is to be placed on the accounts given to Sen<sup>r</sup> Quadra, or myself, by the American commanders, who are stated to have been eye-witnesses of most of the transactions. The documents and papers which Captain Colnett has since produced to me, fully prove that the Americans wilfully misrepresented the whole affair, to the prejudice of his character, and the interest of his Britannic Majesty's subjects, engaged in commercial pursuits on the coast of North-West America.

Having been particularly careful to state all the important circumstances that came to my knowledge during my negociation with Sen<sup>r</sup> Quadra, whether they were such as tended to establish the claims, or militate against the pretensions, of the British crown to the territories at Nootka, I have thought it proper, in addition to what has been already related, to give the following brief account of the capture of the Argonaut, as represented to me by Captain Colnett.

The settlement which Captain Colnett had in contemplation to make at Nootka, had been concerted at Macao, in November, 1789, at the time he entered into copartnership with several English gentlemen resident at that place.

On this occasion, Captain Colnett made it his particular business to become informed with respect to the property which those gentlemen held in the two vessels, the North-West America and Ephigenia, then on the coast of Nootka; for as to the land, he entertained no doubt of its belonging to Great Britain, as the subjects of that state were the first European people who had discovered the country; and he was further well satisfied, that no other power whatever had a right to dispossess the gentlemen with whom he had engaged, of their property at Nootka, because he and they considered it to be

exclusively their own. The intention of forming a settlement was known to Mr. Hudson before his departure in the Princess Royal from Macao; and on his arrival before Captain Colnett at Nootka, such intention was most probably communicated to the Spaniards and the native Indians, who appeared to have been long in expectation of the Argonaut's arrival, and had reserved the greatest part of their furs for the purpose of exchanging them with Captain Colnett, for the articles with which, they had learned, his vessel would be freighted.

Under the ideas which Captain Colnett entertained, that this part of the coast of North-West America belonged to Great Britain, he had no fear of entering any of its ports, because he was duly authorized by the South Sea company to trade in those seas, and had leave to absent himself from his Majesty's service, being at that time a lieutenant in the royal navy. As a defence against hostile Indians, the Argonaut had twelve carriage guns, beside swivels and small arms; but not apprehending any thing unfriendly from the inhabitants of Nootka, nor having become acquainted before he left China, that any difference existed between the courts of London and Madrid, when he arrived off Nootka, on the 3d of July, 1790, the guns of the Argonaut were dismounted, and were all in the hold of the vessel.

About nine o'clock that evening, when at the distance of about three leagues from the entrance into the port, a boat was observed coming towards the Argonaut; but, as the weather was very hazy, it could not be discovered to what nation it belonged. On being hailed, the persons in her laid upon their oars, and requested, in Spanish, permission to come on board, with which Captain Colnett instantly complied. Soon after another Spanish boat, and one belonging to an American vessel, came alongside his vessel, and Captain Colnett now understood that there were two Spanish men of war, and an American ship and sloop, at anchor in Friendly cove. On receiving this information, Captain Colnett hesitated for some time, whether he should, or not, go into Friendly cove; as he had some doubts as to the propriety of putting himself under the command of Spanish ships of war. This objection being made known to Don Martinez, who had arrived in the first boat, he requested, through an interpreter, that Captain Colnett would, nevertheless, afford him some assistance, as the vessels under his command were in great distress for the want of provisions and other necessaries; and as he had paid some attention to Mr. Hudson, the commander of the Princess Royal, one of the four vessels under Captain Colnett's directions (as would be seen by a letter which he produced to Captain Colnett from Mr. Hudson) Martinez hoped Captain Colnett would not be wanting in a return of civility, and intreated him, in the most earnest manner, to enter Friendly cove;

pledging his word of honour, not only as commander in chief of all the ships belonging to his Catholic Majesty, on the northern coasts of the Pacific Ocean, but also as nephew to the viceroy, and in his capacity at Nootka, as the representative of the king of Spain; that Captain Colnett should be at liberty to depart whenever he might think proper; Don Martinez stating, at the same time, that he was then at Nootka for the sole purpose of watching the operations and proceedings of the Russians. These assurances induced Captain Colnett to consider Don Martinez as an officer of high rank and character; and as he did not entertain the most distant idea that any falsehood was attempted to be imposed upon him, or that he was in the least danger of being treated by Martinez with duplicity, he suffered the Spanish launches to tow the Argonaut into port, where she did not arrive until midnight.

The next morning Don Martinez invited Captain Colnett to breakfast on board the Princissa, and afterwards accompanied him on his return to the Argonaut, where Captain Colnett ordered such provisions and stores as he could spare to be got to hand, gave a list of them to Don Martinez, and, at the same time, requested his acceptance of them, with which civility he appeared to be highly pleased and thoroughly satisfied. Don Martinez had not been long on board the Argonaut before he selected Captain Colnett's boatswain from the rest of the crew, who being a native of Gibraltar, spoke the Spanish language very fluently. After some conversation with this man, Don Martinez demanded him of Captain Colnett, as a subject of his Catholic Majesty, and as the boatswain was very desirous of leaving the Argonaut, Captain Colnett remitted the balance then due from him on account of his wages, and discharged him from his service. This circumstance was by no means a pleasant one to Captain Colnett; but, as Don Martinez seemed to be extremely anxious to obtain the release of this man, Captain Colnett did not think it would have been prudent to have resisted his application. His doubts, however, of the professed sincerity of Don Martinez, became increased, by his soon discovering that the Indians declined all sort of trade with the Argonaut. This induced him to determine upon leaving Friendly cove with all possible dispatch, and he acquainted Don Martinez that he purposed to depart in the course of the day. Upon this the Spanish officer offered his launch to assist the Argonaut out of the cove; and it was at this time agreed, that the articles with which Captain Colnett could supply Don Martinez, should be sent to him by the return of the Spanish launch. The promised assistance of this boat not arriving so soon as Captain Colnett had expected, he sent one of his mates to Don Martinez, for the purpose of reminding him of his engagement, and to procure the launch; but, to his

great surprize, instead of the officer returning with the Spanish boat, Captain Colnett received a message from Don Martinez, desiring that he would instantly repair on board the Princissa, and produce his ship's papers for his examination. With this request Captain Colnett immediately complied, and Don Martinez had scarcely looked at them, before he positively asserted that they were all forgeries, although he did not understand a single word of the language in which they were written. With this declaration he threw them on the table, and insisted that the Argonaut should not sail from Nootka until he should think proper to grant permission for her departure. On Captain Colnett complaining of this breach of promise and good faith, Martinez quitted the cabin in an apparent rage, and instantly dispatched an armed party from the deck, who, after knocking Captain Colnett down, arrested him, and detained him as a prisoner on board the Princissa. Don Martinez then sent his launch on board the Argonaut; struck the British, and hoisted Spanish, colours; ordered the Columbia, an American ship, to fire into the Argonaut if she attempted to unmoor; made the officers prisoners, and put the crew into irons. After this the vessel was unloaded, and every individual was robbed of such parts of his private property as was chosen by the Spaniards. In this situation the Argonaut, officers, and crew, remained for ten days, when the Princess Royal appeared in the offing; and on Mr. Hudson, her commander, being perceived by Martinez to be coming near the shore in his boat, he sent out his launch armed, seized the boat, and brought Mr. Hudson on board the Princissa, where a letter was prepared for him to sign, ordering the officer, whom he had left in charge of his vessel, to deliver her up without any resistance. At the yard-arm was rove a rope, with which Mr. Hudson was threatened to be hanged, if he declined signing the letter, or if the sloop under his command should fire at the launch then ready to carry the proposed letter, and which, under these circumstances, he was compelled to sign on board the Princissa.

From the 5th to the 14th of July, 1790, arrangements were making on board the Argonaut for the confinement of the officers and crew during their passage from Nootka to St. Blas, whither Captain Colnett was given to understand they would be sent as prisoners.

The treatment which Captain Colnett received whilst on board the Princissa had nearly proved fatal to him; he was seized with a violent fever, attended with a delirium, which did not abate until he was removed on board his own vessel; here he was made a close prisoner, and confined to the mate's cabin, a place not six feet square. Such parts of the Argonaut's cargo as Martinez thought proper to reject, were returned into the vessel again, and all the officers, and sixteen of the crew, who were British subjects, were, on

the 14th of July, sent in the Argonaut under confinement from Nootka to St. Blas.

Notwithstanding the great distinction with which it had been represented to Sen<sup>r</sup> Quadra, and urged by him to me, Captain Colnett had been received on his arrival at this port, and which he does not deny, in point of treatment, was infinitely better than he had experienced during the time he was under the power and directions of Martinez; yet the remainder of his cargo, stores and provisions, was taken from out of his vessel at St. Blas, and a part only of the former was afterwards restored, whilst the wages of the Spanish navy that were paid to him, for himself, officers, and crew, were nearly counterbalanced by the heavy expences brought against his ship's company during the time of their captivity, for their maintenance, medical and other assistance.

The hardships which were endured, according to Captain Colnett's representation, by himself, his officers, and the sixteen British seamen, during a passage of thirty-two days to St. Blas, are not to be described; but as a detail of these circumstances would lead me into extraneous matter. unconnected with the object (the cession of the territories at Nootka) which made a statement of Captain Colnett's transactions in Friendly cove necessary in the former part of my journal, I shall forbear to mention any thing on that head, and only insert a passage, translated from the Spanish passport, granted by the viceroy of Mexico to Captain Colnett, at the time of the restoration of his vessel, and his liberation from the Spanish territories in America; by which it will appear, that although Don Estevan Martinez had no especial directions to capture either the Argonaut, Princess Royal, or any other British ship, yet all vessels not belonging to his Catholic Majesty, might have been retained at Nootka as good and lawful prizes: this will necessarily leave the reader in some doubt as to the means that were pursued by the American traders then at Nootka, to preserve the privileges which they seem to have enjoyed; and I shall conclude this relation of the business from the testimony of Captain Colnett, by briefly stating how he conducted himself, on receiving a subsequent passport from the viceroy of Mexico.

"The conduct of this officer" (Don Estevan Jose Martinez) "was founded on laws and royal orders, which not only do absolutely prohibit the negociation, establishment, and commerce, of aliens on our coasts of the south seas of both Americas; but ordain also, that they the said aliens, shall be looked upon and treated as declared enemies, without its being understood to be a breach of the good faith, or contrary to the treaties of peace; for in that concluded in the year 1760, and confirmed in the second

article of that in 1763, the arrival of all alien vessels, or their introduction, passage, or commerce on the said coasts, are completely prohibited.

"Under these circumstances, agreed to by the treating parties, and positive declarations of the court of Spain, the vessels Argonaut and Princess Royal might have been retained as good and lawful prizes; but, being desirous to preserve that harmony which at present exists between our court and that of London, and considering also that the sovereigns of both kingdoms will, upon reasonable and just terms, amicably agree to the restoration of the said vessels, I grant a free and safe passport to their Captains James Colnett and Thomas Hudson, that they may proceed to Macao, or sail to any other place they may choose, with the express prohibition that they shall not put into any port or bay of our coasts without some very pressing necessity, or establish themselves there, or trade in them with the Indians, because they may do this in other places or islands not the dominions of his Catholic Majesty."

After Captain Colnett had received this passport, he petitioned the viceroy that he might be permitted to dispose of the remaining part of his cargo on the coast of North-West America, but this was positively refused by the viceroy, who stated that he was bound to give that preference to the subjects of his Catholic Majesty. Notwithstanding that he did not grant Captain Colnett this indulgence, he transmitted to him another passport, in which Captain Colnett was directed to proceed to Nootka, with orders to the commanding officer there, to deliver up the Princess Royal, which vessel had been directed to repair to that port, after having been some months employed in the Spanish service. On Captain Colnett's return to Nootka he did not find the Princess Royal there, nor could he learn any tidings of her destination, and therefore he made the best of his way from Nootka to Macao, agreeably to the injunctions contained in the second passport from the viceroy of Mexico.

In the year 1792, the fur trade, between the north-west coast of America and China, gave employment to upwards of twenty sail of ships and vessels, whose names, and the countries to which they belong, I have thought proper to insert, for the purpose of shewing that my opinions, respecting the value of this trade, were not only founded upon observation, but confirmed by the practice of several European states, and adventurers from the Asiatic, Chinese, and American shores.

Ships and vessels.	Commanders.	To what country belonging.
Ship Butterworth,	Brown,	London.
Sloop Lee Boo,	Sharp,	ditto.
Cutter Jackal,	Steward,	ditto.
Brig Three Brothers,	Alder,	ditto.
Schooner Prince William Henry,	Ewen,	ditto.
Ship Jenny,	Baker,	Bristol.
Brig Halcyon,	Barclay,	Bengal.
Brig Venus,	Shepherd,	ditto.
Snow ——	Moor,	Canton.
Brig ——	Costidge,	ditto.
Brig ——	Barnett,	ditto.
Ship Columbia,	Gray,	Boston, America.
Sloop Adventure, (Built at Clayoquot, tender to the Columbia)	Haswell,	ditto.
Ship Jefferson,	Roberts,	ditto.
Brig Hope,	Ingraham,	ditto.
Brig Hancock,	Crowell,	ditto.
Brig Washington,	Kendrick,	ditto.
Ship Margaret,	Magie,	New York.
Ship Ephigenia,	Viana,	Portugal.
Brig Fenis and St. Joseph,	Andrede,	ditto.
Ship ——	Unknown,	France.

Beside these, the vessels already mentioned in my journal, belonging to his Catholic Majesty, frequently resorted to the port of Nootka.

When such a spirit for enterprise as this, is thus manifested by the people of so many different nations, and directed from all quarters of the globe to these shores, there can remain no more doubt, with respect to the commercial advantages which are likely to be attendant on such speculations, than that many unjust proceedings will take place amongst the several persons concerned, who, in the avidity for promoting their respective interests, become competitors for the commodity of which each is in pursuit, and destroy the general benefits which, under wise and good regulations

would result to all. A retrospective view of these circumstances, and the behaviour of Sen<sup>r</sup> Quadra, in the negociation which, with him I had the honour to conduct, respecting the cession of the territories at Nootka to the crown of Great Britain; will serve to shew in what an important light the court of Spain beholds her interests in this valuable country, and what also are the commercial advantages that most probably would accrue to the adventurers on the coast, were their dealings properly restrained, and their general conduct wisely regulated.

Although we did not meet with any Russian vessels at Nootka, yet I am clearly of opinion the people of that nation are more likely than those of any other to succeed in procuring furs, and the other valuable commodities, from these shores, with which a most beneficial trade might be established between North-West America, Japan, and the northern parts of China. Of this I was well persuaded, from the accounts I received from Symloff, and from my own observations on the general conduct of the Russians towards the Indians, in the several places where we found them under their controul and direction. Had the natives about the Russian establishments in Cook's inlet, and Prince William's sound been oppressed, dealt hardly by, or treated by the Russians as a conquered people, some uneasiness amongst them would have been perceived, some desire for emancipation would have been discovered; but no such disposition appeared, they seemed to be held in no restraint, nor did they seem to wish, on any occasion whatever, to elude the vigilance of their directors. For some of our commodities that were valuable to them, they would offer their furs in exchange; but in no instance did they propose any thing of the kind for sale to the disadvantage of their employers. The Russians, most likely, unable to reduce the inhabitants of the insular country to the south-eastward from Cross sound, have preferred to sit down amongst those to the westward; where, from the compactness of the coast, and the lofty impassable mountains which approach the sea shore, the natives are restrained from indulging in the wandering life to which their more eastern neighbours are accustomed, and who being a much more warlike race, may possibly have been found by the Russians to be less tractable

Notwithstanding that our survey of the coast of North-West America has afforded to our minds the most satisfactory proof that no navigable communication whatever exists between the North Pacific and North Atlantic Oceans, from the 30th to the 56th degree of north latitude, nor between the water of the Pacific, nor any of the lakes or rivers in the interior part of the continent of North America; yet, as it is very difficult to undeceive, and more so to convince the human mind, when prepossessed of

long adopted notions, however erroneously they may have been founded, and especially when circumstances may be resorted to which have the appearance of being capable of furnishing new matter for ingenious speculative opinions, it may not be improper to state, that although, from unavoidable circumstances, Mr. Broughton<sup>[8]</sup> was compelled, in his examination of Columbia river, to desist from attempting to ascertain the navigable extent of the several small branches which fall into that river, yet that gentleman was thoroughly convinced from the view he had obtained of each, and the circumstances attendant on them all, that no one of those branches admitted of any navigable communication whatever with the interior country.

With respect to the ancient discoveries of De Fuca, they appear to be upheld by tradition alone, and ought therefore to be received with great latitude, and to be credited with still more caution. A celebrated writer on geography<sup>[9]</sup> appears to have been perfectly convinced that this oral testimony was correct, although he candidly acknowledges that "we have no other than verbal report of De Fuca's discovery; he communicated the information to Mr. Lock at Venice, and offered to perform a voyage," I presume, for the further exploring of those regions, "on condition of having payment of the great losses he had sustained, to the value of sixty thousand ducats, when captured by Sir Thomas Cavendish in the South Seas. John de Fuca, the Greek pilot, in 1592, sailed into a broad inlet, between the 47th and 48th degrees, which led him into a far broader sea, wherein he sailed above twenty days, there being at the entrance on the north-west coast, a great head land or island, with an exceeding high pinnacle or spired rock, like a pillar, thereupon."

This is the whole that can be collected from the information of this supposed navigator; which Mr. Dalrymple says exactly corresponds with the discoveries of the Spaniards, who "have recently found an entrance in the latitude of 47° 45′ north, which in twenty-seven days' course brought them to the vicinity of Hudson's bay." On making inquiries of the Spanish officers attached to the commission of Sen<sup>r</sup> Melaspina, as also of Sen<sup>r</sup> Quadra, and several of the officers under his orders, who, for some time past, had been employed in such researches respecting so important a circumstance, I was given to understand by them all, that my communication was the first intelligence they had ever received of such discoveries having been made; and as to the navigators De Fuca, De Fonte, and others, these gentlemen expected to have derived intelligence of them from us, supposing, from the English publications, that we were better acquainted with their achievements

than any part of the Spanish nation. A commander of one of the trading vessels met with such a pinnacle rock in the latitude of 47° 47′, but unluckily there was no opening near it, to identify it being the same which the Greek pilot had seen; but this circumstance can easily be dispensed with, for the sake of supporting an hypothesis, only by supposing the opening to be further to the northward. That such a rock might have been seen in that latitude is not to be questioned, because we saw numbers of them, and it is well known, that not only on the coast of North-West America, but on various other coasts of the earth, such pinnacle rocks are found to exist.

On these grounds, and on these alone, stands the ancient authority for the discoveries of John De Fuca; and however erroneous they may be, seem to have been acknowledged by most of the recent visitors to this coast, who as well as myself, (as is too frequently and injudiciously the case) have been led to follow the stream of the current report. By my having continued the name of De Fuca in my journal and charts, a tacit acknowledgment of his discoveries may possibly, on my part, be inferred; this however, I must positively deny, because there has not been seen one leading feature to substantiate his tradition: on the contrary, the sea coast under the parallels between which this opening is said to have existed, is compact and impenetrable: the shores of the continent have not any opening whatever, that bears the least similitude to the description of De Fuca's entrance; and the opening which I have called the supposed straits of Juan de Fuca, instead of being between the 47th and 48th degrees, is between the 48th and 49th degrees of north latitude, and leads not into a far broader sea or mediterranean ocean. The error, however, of a degree in latitude may, by the advocates for De Fuca's merits, be easily reconciled, by the ignorance in those days, or the incorrectness in making such common astronomical observations; yet we do not find that Sir Francis Drake, who sailed before De Fuca, was liable to such mistakes.

The discoveries of the Portuguese or Spanish admiral De Fonte, De Fonta, or De Fuentes, appear to be equally liable to objections, as those said to have been made by De Fuca. Little reliance, I trust, will hereafter be placed on that publication of De Fonta's account, wherein it is stated that "He sailed 260 leagues in crooked channels, amongst islands, named the Archipelago of St. Lazarus, and on the 14th of June 1640, he came to a river which he named Rio de los Reyes, in 53° of north latitude; he went up it to the north-eastward 60 leagues; it was fresh 20 leagues from the mouth, the tide rising 24 feet, the depth not less than four or five fathoms at low water all the way into lake Belle, which he entered the 22d of June; in this lake there was generally six or seven fathoms; and at a particular time of tide

there is a fall in the lake; that from a good port sheltered by an island on the south side of lake Belle, De Fonta on the 1st of July sailed in his boats to a river which he named Parmentiers; that he passed eight falls, in all thirty-two feet perpendicular, from its source in lake Belle, into a large lake which he reached the 6th of July. This lake he named De Fonte; it is 160 leagues long, and 60 broad, lying E. N. E. and W. S. W. in length, having in some places 60 fathoms depth, abounding with cod and ling."

It is here necessary to interrupt the thread of De Fonta's curious narrative for a moment, in order, if possible, to reconcile the nature of his voyage with his statement of facts. After his arrival in Rio de los Reyes, he sailed in his ship 60 leagues to lake Belle; 40 leagues of this distance were fresh water; and then in his boats, through that lake and the river Parmentiers; where, after passing eight falls he arrived in lake de Fonte, which he finds abounding with cod and ling; but the extent of lake Belle is not mentioned, nor whether the water in lake de Fonte was fresh or salt, though from common reasoning, it is natural to conclude, that since the water in Rio de los Reyes was fresh at the distance of 40 leagues from the lake whence the river derives its origin, that the water in lake De Fonte, where cod and ling are said to abound, must be fresh also. But to return to the narrative. Lake de Fonte contained several very large islands, and ten small ones: from the E. N. E. extremity of this lake, which he left the 14th of July, he passed in ten hours with a fresh wind and whole ebb a lake, which he named Strait Ronquillo, 34 leagues long, and two or three broad, with 20, to 26 and 28 fathoms depth. On the 17th he came to an Indian town, where he learnt there was a ship in the neighbourhood; to this ship he sailed, and found on board only one man advanced in years and a youth; the man was the greatest in the mechanical part of mathematicks he had ever seen: he learnt they were from Boston in New England, the owner named Gibbons, who was major general of Maltachusett's, and the whole ship's company came on the 30th of July. On the 6th of August De Fonta made the owner some valuable presents, and took some provisions from them, and gave Captain Shapely, the commander of the vessel, one thousand pieces of eight for his fine charts and journals. On the 11th of August De Fonta arrived at the first fall in the river Parmentiers, and on the 16th on board his ship in lake Belle.

The extensive archipelago, in which De Fonta had sailed through crooked channels 260 leagues; the river navigable for shipping that flowed into it, up which he had sailed in his ship 60 leagues; the water becoming fresh after he had entered and passed in it 20 leagues; its communicating by other lakes and rivers with a passage, in which a ship had arrived from Boston in New England; are all so circumstantially particularized, as to give

the account, at first sight, an air of probability, and on examination, had it been found reasonably connected together, which is by no means the case; a trifling difference in point of description or situation would have been pardoned.

The Rio de los Reyes Mr. Dalrymple states (according to the Spanish geographers, under the authority of which nation De Fonta is said to have sailed) to be in the 43d; according to the English in the 53d; and according to the French, in the 63d degree of north latitude, on the western coast of North America. If it be necessary to make allowance for the ignorance of De Fonta, or the errors in his observations, any other parallel along the coast may be assigned with equal correctness.

Under the 43d parallel of north latitude on this coast, no such archipelago nor river does exist; but between the 47th and 57th degrees of north latitude, there is an archipelago composed of innumerable islands, and crooked channels; yet the evidence of a navigable river flowing into it, is still wanting to prove its identity; and as the scrupulous exactness with which our survey of the continental shore has been made within these limits, precludes the possibility of such a river having been passed unnoticed by us, as that described to be of Rio de los Reyes, I remain in full confidence, that some credit will hereafter be given to the testimony resulting from our researches, and that the plain truth undisguised, with which our labours have been represented, will be justly appreciated, in refutation of ancient unsupported traditions.

I do not, however, mean positively to deny the discoveries of De Fonta, I only wish to investigate the fact, and to ascertain the truth; and I am content with having used my endeavours to prove their improbability as published to the world. The broken region which so long occupied our attention, cannot possibly be the archipelago of St. Lazarus, since the principal feature by which the identity of that archipelago could be proved is that of a navigable river for shipping flowing into it, and this certainly does not exist in that archipelago which has taken us so much time to explore; hence the situation cannot be the same, and for that reason I have not affixed the name of De Fonta, De Fonte, or Fuentes to any part of those regions. It is however to be remembered, that our geography of the whole coast of North-West America is not yet complete, and that the French navigators, who have stated the archipelago of St. Lazarus to be in the 63d degree of north latitude, may not yet be in an error.

The stupendous barrier mountains certainly do not seem to extend in so lofty and connected a range to the northward of the head of Cook's inlet, as

to the south-eastward of that station; and it is possible that in this part, the chain of mountains may admit of a communication with the eastern country, which seems to be almost impracticable further to the southward. In this conjecture we are somewhat warranted by the similarity observed in the race of people inhabiting the shores of Hudson's bay and those to the northward of North-West America.

In all the parts of the continent on which we landed, we nowhere found any roads or paths through the woods, indicating the Indians on the coast having any intercourse with the natives of the interior part of the country, nor were there any articles of the Canadian or Hudson's bay traders found amongst the people with whom we met on any part of the continent or external sea shores of this extensive country.

### FINIS.

- [8] Now a post-captain in the royal navy.
- See Dalrymple's plan for promoting the fur trade. 1789.
- [10] See Dalrymple's plan for promoting the fur trade. 1789.

# Transcriber's Notes

It is not surprising that spelling was variable across the six volumes of this work. The spelling of variable words, including the names of sails, was changed to match that which predominated, even though that spelling may not have been the preferred spelling at the time of writing or may now be obsolete. Other obvious typographic errors were corrected. All other words are as in the original.

The table of contents for all six volumes was originally published only in the first volume. The part of the table of contents relating to each subsequent volume is reproduced in that volume.

[The end of A voyage of discovery to the North Pacific Ocean, and round the world Vol. 6 by George Vancouver]