

VOYAGE AROUND THE WORLD.

Note on this digital version.

I came to read the journal of Bougainville's voyage, in the original French, through my passion for things maritime and ancient.

To confirm (or otherwise) that I had correctly understood some of the 18th century French, I looked for a translation in English. I found the following one, made in about 1772, by one John Reinhold Forster, F. A. S.

Unfortunately, the digital version available had not come through the optical character recognition process very well. In places it was unreadable, hence this transcription.

In so doing, the only changes I have made are:

- a) The old form of using *f* for *s*, I have changed thus *failing* becomes *sailing*.
- b) The outmoded ligatures *ct* and *st* have been replaced with standard font.
- c) Repeated words that were obviously due to typesetting errors, have been removed.

All spelling inconsistencies have been retained, even where the same word is spelt differently in several places. Words normally capitalised have been left as written, eg. captain Wallace.

The rather erratic punctuation that is more, I suspect, the responsibility of the translator than of the author, remains unchanged.

Neither the spelling nor the punctuation, however, should cause the modern reader any real difficulty.

The side notes of the original have been retained and have been inserted into the text in contrasting bold type, separated, above and below, by a line space.

The footnotes added by Reinhold Forster are included at the bottom of each page, to which they refer, in contrasting typeface.

In this translation several things struck me as requiring some comment or redress:

- a) Reinhold Forster's interpretation of what is written does not invariably convey what Bougainville intended to be understood.
- b) Many of Reinhold Forster's footnotes are, in my opinion, unjustly hostile. He worked at a time, I suppose, when the entente was not quite as cordiale as it could have been!
- c) Some of the original has been omitted, that should have been left in. Some material has been added, that should have been left out.

So, my next project will be to make a new translation of Bougainville's book. In it I will try, as do Bougainville's own words, to bring out the warmth and compassion of this courageous and courteous mariner, who at a time when those qualities were not always associated with sea-officers, ventured scantily equipped into perilous waters.

In that there will be a certain irony, for my initials are also JF.

A
V O Y A G E
R O U N D T H E
W O R L D.

Performed by Order of

HIS MOST CHRISTIAN MAJESTY,

In the Year 1766, 1767, 1768, and 1769.

B Y

LEWIS DE BOUGAINVILLE,

Colonel of Foot, and Commodore of the Expedition, in the
Frigate La Boudeuse and the Store-ship L'Etoile.

Translated from the French

By JOHN REINHOLD FORSTER, F. A. S.

LONDON,

Printed for J. Nourse, Bookseller to HIS MAJESTY, in the Strand: and
T. DAVIES, Bookseller to the Royal Academy, in Russel-street, Covent-garden.
M DCC LXXII.

T O

JAMES WEST, Esq.

High Steward of St. Alban's, Recorder of pool,

AND

PRESIDENT of the ROYAL SOCIETY

SIR,

I Beg leave to offer you the Translation of a Work written by a learned, intelligent, and judicious Traveller, which abounds with remarkable events and curious observations; equally instructive to future navigators, and interesting to science in general, and Geography in particular.

THE place you occupy with great honour in the Royal Society, the zeal with which you promote and countenance whatever has a tendency towards the advancement of Science, and the remarkable kindness and favour you always have treated me with, encourages me to prefix your name to this publication.

ACCEPT then, Sir, this public acknowledgement of the deep sense of gratitude and attachment your benevolence has raised, with the sincerest wishes for your health, prosperity, and the enjoyment of every intellectual and moral pleasure. Believe me to be, with the truest esteem,

S I R,

Your most obliged,
and obedient
humble servant,

JOHN REINHOLD FORSTER,

THE TRANSLATOR'S PREFACE.

THE present translation of Mr de Bougainville's Voyage round the World merits, in more than one respect, the attention of the public.

Circumnavigations of the globe have been of late the universal topics of all companies: everyone takes upon him to be a competent judge in matters which very few understand, mostly for want of good and authentic information: this work will enable the reader to judge with greater precision of the vague discourses held on this subject.

Nautical advices and observations are always interesting, from whatever quarter they may happen to come, provided they are communicated by a man of known abilities; and nobody, we think, will question those of Mr de Bougainville.

The superiority of the British discoveries in the great ocean, between America and Asia, cannot be ascertained, unless by an authentic account of the discoveries of the rival nation; who, after a great exertion, and the advantage of being supplied by the Spaniards with all the necessaries of a great distance from home, before they entered the South Pacific Ocean, however discovered very little; and what they discovered, had partly been seen by English navigators, or some Spanish ones of older date, for that the honour of the greatest discoveries made within two centuries, in those remote seas, is entirely reserved to the British nation, and their spirit and perseverance in conducting this great and interesting event.

The envious and scandalous behaviour of the Portuguese viceroy, at Rio de Janeiro, towards our philosophers, which will for ever brand that mean barbarian with indelible ignominy, is confirmed by a familiar act of despotic barbarism towards another nation, related in this work. The French, who are so remarkable for the graving [1] with which they ornament their principal publications, will find, that the charts joined to this translation, though reduced to a sixteenth part of the surface of the originals, are, however, infinitely superior to them in point of neatness, convenience, and accuracy.

Without being less useful, we have connected, in our charts, the whole run of their ships, from the beginning of their discoveries to Batavia. The chart of the Magellanic Straits is of the same size, and upon the same scale as in the original, but more accurate; and the names by which the English call the several points of land, the bays and the reaches, are all added to the French names. The omission of the charts of Rio de la Plata, and of the Falkland Isles, is by no means an imperfection; because, very lately, two charts have been published in England, one equally good of the first, and a better one of the latter; it would therefore be needless to multiply the identical charts, or to give the public some imperfect ones.

Though Mr de Bougainville is a man of undoubted veracity and abilities, he has, however, in a few instances, been misled by false reports, or prejudiced in favour of his nation: we have, in some additional notes, corrected as far as it was in our power these mistakes, and impartially vindicated the British nation, where we thought the author had been unjustly partial; for the love of one's country is, in our opinion, very consistent with common justice and good breeding; qualities which never should be wanting in a philosopher.

Our author endeavours to make it highly probable, that the spice-trade, which has hitherto been the great source of the grandeur and wealth of the Dutch East India Company, will soon be divided among them, the French, and the English. We have reason to believe the French to be in a fair way of getting the spices in their plantations, as Mr de Poivre has actually planted at Isle de France some hundreds of clove and nutmeg-trees. Every true patriot will join in the wish, that our English East India Company, prompted by a noble zeal for the improvement of natural history, and every other useful branch of knowledge, might send a set of men properly acquainted with mathematics, natural history, physic, and other branches of literature, to their vast possessions in the Indies, and every other place where their navigations extend, and enable

them to collect all kinds of useful and curious informations; to gather fossils, plants, seeds, and animals, peculiar to these regions; to observe the manners, customs, learning, and religion of the various nations of the Earth; to describe their agriculture, manufactures, and commerce; to purchase Hebrew, Persian, Braminic manuscript, and such as are written in the various characters, dialects, and languages of the different nations; to make observations on the climate and constitution of the various countries; the heat and moisture of the air, the salubrity and noxiousness of the place, the remedies usual in the diseases of hot countries, and various other subjects. A plan of this nature, once set on foot in a judicious manner, would not only do honour to the East India Company, but it must at the same time become a means of discovering many new and useful branches of trade and commerce; and there is likewise the highest probability, that some unsearched island, with which the Eastern Seas abound, might produce the various spices, which would greatly add to the rich returns of the Indian cargoes, and amply repay the expenses caused by such an expedition.

Mr de Bougainville's work abounds in marine phrases, which makes the translation of it very difficult, even to a native; but a foreigner, and a man unacquainted with nautical affairs, must be under still greater difficulties: we should have been under this predicament, had it not been for the kind assistance of two worthy friends, who not only enabled us to do justice to the original, but also to make the whole intelligible to men conversant with navigation: it is therefore no more than justice to acknowledge this favour publicly [1]

1 We have thought proper to omit M. Pereire's discourse on the nature of the language of Taiti, as being a very trifling performance, founded on the imperfect vocabulary, and defective pronunciation of Actourou.

INTRODUCTION.

I THINK it would be of use to give, at the head of my relation, an account of all the voyages that ever were performed round the world, and of the different discoveries which have hitherto been made in the South Sea or Pacific Ocean.

Ferdinand Magalhaens, a Portuguese, commanding five Spanish ships, left Seville in 1519, discovered the straits which bear his name, and through them he came into the Pacific Ocean, where he first discovered two little desert isles, on the south side of the Line, afterwards the Ladronecs, and last of all the Philippines. His ship, called *la Victoria*, was the only one out of the five that returned to Spain by the Cape of Good Hope: On her return she was carried on shore at Seville, and set up as a monument of this expedition, which was the boldest that had hitherto been undertaken by men. Thus it was for the first time physically demonstrated, that the earth was of a spherical figure, and its circumference ascertained.

Sir Francis Drake, an Englishman, set sail from Plymouth, with five ships, the 15th of September, 1577, and returned thither with only one, the 3rd of November 1580. He was the second that sailed round the world. Queen Elizabeth dined on board his ship, called the *Pelican*, which was afterwards preserved in a dock at Deptford, with a very honourable inscription on the main-mast. The discoveries attributed to Drake are very precarious. The charts of the South Seas contain a coast which is placed below the polar circle, some isles to the north of the Line, and likewise New Albion to the north.

Sir Thomas Cavendish, an Englishman, left Plymouth the 21st of July, 1586, with three ships, and returned with two on the 9th of September, 1588. This voyage, which was the third round the world, was productive of no new discoveries.

Oliver Van Noon, a Dutchman, sailed from Rotterdam the 2nd of July, 1598, with four ships, passed through the straits of Magalhaens, sailed along the western coasts of America, from whence he went to the Ladronecs, the Philippines, the Moluccas, the Cape of Good Hope, and returned to Rotterdam with one ship the 26th of August, 1601. He made no discoveries in the South Seas.

George Spilberg, a Dutchman, sailed from Zeeland the 8th of August, 1614, with six ships; he left two Ships before he came to the straits of Magalhaens, passed through them, attacked several places on the coasts of Peru and Mexico; from whence, without discovering anything on his course, he sailed to the Ladronecs and Moluccas. Two of his ships re-entered the ports of Holland, on the first of July, 1617.

James Lemaire and William Cornelius Schouten immortalized their names much about the same time. They sailed from the Texel the 14th of June, 1615, with the ships *Concord* and *Horn*, discovered the straits that bear the name of Lemaire, and were the first that ever entered the South Seas by doubling Cape Horn. In that ocean they discovered the Isle of Dogs, in $15^{\circ} 15'$ south latitude, and about 142° west longitude from Paris; the Isle without Bottom (*Zonder Grond*) in 15° south latitude, one hundred leagues westward; Water Island in $14^{\circ} 46'$ south latitude, and fifteen leagues more to the west; at twenty leagues westward of this, Fly Island, in $16^{\circ} 10'$ south latitude; and between 173° and 175° west longitude from Paris, two isles, which they called Cocos and Traitor's; fifty leagues more westward, the isle of Hope; next the Isle of Horn, in $14^{\circ} 56'$ south latitude, and about 17° east longitude from Paris; they then coasted New Guinea, passed between its western extremity and the Isle of Gilolo, and arrived at Batavia in October 1616. George Spilberg stopped them there, and they were sent to Europe aboard the East India Company's ships; Lemaire died, of a sickness at the Isle of Mauritius; Schouten returned to his country; the *Concord* and *Horn* came back in two years and ten days.

James l'Hermite, a Dutchman, commanding a fleet of eleven ships, sailed in 1623, with the scheme of making the conquest of Peru; he got into the South Seas round Cape Horn, and harassed the Spanish coasts, from whence he went to the Ladrones, and thence to Batavia, without making any discoveries in the South Seas. He died, after clearing the straits of Sonda; and his ship, almost the only one of the whole fleet, arrived in the Texel the 9th of July, 1626.

In 1683, Cowley, an Englishman, sailed from Virginia, doubled Cape Horn, made several attacks upon the Spanish coasts, came to the Ladrones, and returned to England by the Cape of Good Hope, where he arrived on the 12th of October, 1686. This navigator has made no discoveries in the South Seas; he pretends to have found out the Isle of Pepis in the North Sea, [1] in 47⁰ southern latitude, about eighty leagues from the coast of Patagonia; I have sought it three times, and the English twice, without finding it.

Woodes Rogers, an Englishman, left Bristol on the 2nd of August, 1708, doubled Cape Horn, attacked the Spanish coast up to California, from whence he took the same course which had already been taken several times before him, went to the Ladrones, Moluccas, Batavia, and doubling the Cape of Good Hope, he arrived in the Downs the first of October, 1711.

Ten years after, Roggewein, a Dutchman, left the Texel, with three ships; he came into the South Seas round Cape Horn, sought for Davis's Land without finding it; discovered to the south of the Tropic of Capricorn, an isle which he called Easter Island, the latitude of which is uncertain; then, between 15° and 16° south latitude, the Pernicious Isles, where he lost one of his ships; afterwards, much about the same latitude, the isles Aurora, Vesper, the Labyrinth composed of six islands, and Recreation Island, where he touched at. He next discovered three isles in 12° south, which he called the Baurman's Isles; and lastly, in 11° south, the Isles of Tienhoven and Groningen; then sailing along New Guinea and Papua, he came at length to Batavia, where his ships were confiscated. Admiral Roggewein returned to Holland, on board a Dutch India-man, and arrived in the Texel the 11th of July, 1723, six hundred and eighty days after his departure from the same port.

The taste for great navigations seemed entirely extinct, when, in 1741, Admiral Anson made a voyage round the world, the excellent account of which is in every body's hands, and has made no new improvement in geography.

After this voyage of Lord Anson's, there was no considerable one undertaken for above twenty years. The spirit of discovery seems to have been but lately revived.

Commodore Byron sailed from the Downs the 26th of June, 1764, passed through the straits of Magalhaens; discovered some isles in the South Sea, sailing almost due north-west, arrived at Batavia the 28th of November, 1765, at the Cape the 24th of February, 1766, and in the Downs the 9th of May, having been out upon this voyage six hundred and forty-eight days.

Two months after commodore Byron's return, captain Wallace sailed from England, with the Dolphin and Swallow sloops; he went through the straits of Magalhaens, and as he entered the South Seas, he was separated from the Swallow, commanded by captain Carteret he discovered an isle in about 18°, some time in August, 1767: he sailed up to the Line, passed near Papua, arrived at Batavia in January, 1768, touched at the Cape of Good Hope, and returned to England in May the same year.

1 North Sea signifies here the Atlantic Ocean, and is put in opposition to South Sea; the former taking in the ocean on this side the Magellanic straits, the latter that which is west of them. The appellation, though somewhat improper, by calling the sea about the south pole the North Sea, it however sometime employed by some writers. F.

As Mr de Bougainville's list of circumnavigators is very imperfect, we will endeavour to give a more complete one in few words.

1. Fernando Magalhaens, 1519.
2. Sir Francis Drake sailed from Plymouth the 15th of November, 1577, but was obliged to put back on account of a storm; after which, he set sail again the 13th of December, and returned the 16th of September, 1580.
3. Sir Thomas Cavendish, 1586-88.
4. Simon de Cordes, a Dutchman, sailed in 1598-1600.
5. Oliver Van Noort sailed the 13th of September, 1598, and returned the 22d of August. 1601.
6. George Spielbergen, a German in the Dutch service, 1614-1617.
7. William Cornelius Schouten with Jacob Le Maire, 1615-1617.
8. Jacob l'Hermite with John Hugo Schapenham sailed from Goeree, in the province of Holland, the 29th of April, 1623, and arrived in the Texel the 9th of July 1626.
9. Henry Brouwer, a Dutchman, in 1643.
10. Cowley, in 1683-1686.
11. William Dampier, an Englishman, sailed in 1689, and returned in 1691. He has been omitted by M. de Bougainville in the list of circumnavigators because he did not go round the world in one and the same ship.
12. Beaucheline Gouin, In 1699.
13. Edward Cooke, an Englishman, made the voyage in the years 1708 and 1711.
14. Woodes Rogers, an Englishman, sailed from Bristol, June 15th, 1708, and returned 1711.
15. Clipperton and Shelvocke, two Englishmen, sailed the 13th of February, 1719, and returned in 1722 the former to Galway in Ireland, in the beginning of June, the latter to London, on the first of August.
16. Roggewein, a Mecklenburger, in the Dutch service, sailed the 16th of July, 1621, and returned the 11th July, 1723.
17. Lord Anson, 1740-1744.
18. Commodore Byron, 1764-1766.
19. The Dolphin and Swallow sloops. The first 1766-1768. the second 1766-1769.
20. M. de Bougainville, 1766-1769.
21. The Endeavour sloop, captain Cooke, which sailed in August, 1768, to observe the transit of Venus, came to Batavia the latter end of 1770, and returned to England in July 1771.

From this list, it appears that the English have undertaken the greatest number of voyages with a design to make discoveries, unattended by that selfishness with which most of the Dutch voyages were entered upon, merely with a view to promote the knowledge of geography, to make navigation more safe, and like wise to throw further lights on the study of nature. F.

His companion Carteret, after having suffered many misfortunes in the South Sea, and lost almost all his crew, came to Macassar in March 1768, to Batavia the 15th of September, and to the Cape of Good Hope towards the end of December, It will appear in the sequel, that I

overtook him on the 18th of February, 1769, in 11° north latitude. He arrived in England in June.

It appears, that of these thirteen voyages which have been made round the world,[1] none belongs to the French nation, and that only six of them have been made with the spirit of discovery; viz. those of Magalhaens, Drake, Le Maire, Roggewein, Byron, and Wallace; the other navigators, who had no other view than to enrich themselves by their attacks upon the Spaniards, followed the known tracks, without increasing the knowledge of geography. In 1714, a Frenchman, called la Barbinais le Gentil, sailed, on board a private merchant ship, in order to carry on an illicit trade, upon the coast of Chili and Peru. From thence he went to China, where, after staying some time in various factories, he embarked in another ship than that which had brought him, and returned to Europe, having indeed gone in person round the world, though that cannot be considered as a circumnavigation by the French nation. [2] Let us now speak of those who going out either from Europe, or from the western coasts of South-America, or from the East-indies, have made discoveries in the South Seas, without tailing round the world.

It appears that one Paulmier de Gonneville, a Frenchman, was the first who discovered any thing that way, in 1503 and 1504. The countries which he visited are not known; he brought however with him a native of one of them, whom the government did not send back, for which reason, Gonneville, thinking himself personally engaged, gave him his heiress in marriage.

Alfonzo de Salazar, a Spaniard, discovered in 1525 the Isle of St. Bartholomew, in 14⁰ north latitude, and 158° east longitude from Paris.

Alvaro de Saavedra, left one of the ports of Mexico in 1526, discovered, between 9⁰ and 10⁰ north, a heap of isles, which he called the King's Isles, much about the lame longitude with the Isle St. Bartholomew; he then went to the Philippines, and to the Moluccas, and on his return to Mexico, he was the first that had any knowledge of New Guinea and Papua. He discovered likewise, in twelve degrees north, about eighty leagues east of the King's Isles, a chain of low islands, which he called *Islas de los Barbudos*.

Diego Hurtado and Hernando de Grijalva, who sailed from Mexico in 1533, to search the South Seas, discovered only one isle, situated in 20° 30' north latitude and about 100' west longitude from Paris; they called it St. Thomas Island.

Juan Gaëtan sailed from Mexico in 1542, and likewise kept to the north of the equator. He there discovered, between 20° and 9° in various longitudes, several isles; viz. *Rocca Partida*, the *Coral Isles*, the *Garden Isles*, the *Sailor Isles*, the *Isle of Arezifa*, and at last he touched at New Guinea, or rather, according to his report, at the isles that were afterwards called *New Britain*; but Dampier had not yet discovered the passage which bears his name.

1 Dom Pernetty, in his Dissertation upon America, speaks of a voyage round the world, in 1719, by captain Shelvock, I have no knowledge of this voyage--Note of Mr de B.

2 The author is very felicitous to exclude Gentil de la Barbinais from the honour of being the first circumnavigator of the French nation, in order to secure it to himself; though it is a real circumnavigation. The famous Italian, Giovan Francisco Carreri, cannot with propriety be called a circumnavigator, though he made the tour of the globe in the years 1693--1698, for he landed in Mexico, and crossed America by land, and went again to the Manilas by sea, and thence to China and Europe, on board of other ships.

The following voyage is more famous than all the preceding ones.

Alvaro de Mendonça and Mindana, leaving Peru in 1567, discovered those celebrated isles, which obtained the name of Solomon's Islands, on account of their riches; but supposing that the accounts we have of the riches of these isles be not fabulous, yet their situation is not known, and they have been sought for since without any success. It appears only, that they are on the south side of the Line, between 8° and 12° . The Isle Isabella, and the land of Guadalcanal, which those voyages mention, are not better known.

In 1595, Alvaro de Mindana, the companion of Mendonça, in the preceding voyage, sailed again from Peru, with four ships, in search of the Solomon's Isles: he had with him Fernando de Quiros, who afterwards became celebrated by his own discoveries. Mindana discovered, between 9° and 11° south latitude, about 108° west from Paris, the isles of San Pedro, Magdalena, Dominica, St. Christina, all which he called *Las Marquesas de Mendonça*, in honour of Donna Isabella de Mendonça, who made the voyage with him; about twenty-four degrees more to the westward, he discovered the Isle of San Bernardo; almost two hundred leagues to the west of that, the Solitary Isle; and lastly, the Isle of Santa Cruz, situated nearly in 140° east longitude from Paris. The fleet sailed from thence to the Ladrones, and lastly to the Philippines, where general Mindana did not arrive, nor did any one know since what became of him.

Fernando de Quiros, the companion of the unhappy Mindana, brought Donna Isabella back to Peru. He sailed from thence again with two ships, on the 21st of December, 1605 and steered his course almost south-west. He discovered at first a little isle, in about 25° south latitude, and about 124° west longitude from Paris; then, between 18° and 19° south, seven or eight low, and almost inundated islands, which bear his name, and in 13° south lat. about $157'$ west from Paris, the isle which he called Isle of Beautiful People. Afterwards he sought in vain for the Isle of Santa Cruz, which he had seen on his first voyage, but discovered, in 13° south lat. and near 176° east longitude from Paris, the Isle of Taumaco; likewise, about a hundred leagues west of that isle, in 15° south lat. a great continent, which he called *Tierra austral del Espirità Santo* and which has been differently placed by the several geographers. There he ceased to go westward, and sailed towards Mexico, where he arrived at the end of the year 1606, having again unsuccessfully sought the Isle of Santa Cruz.

Abel Tasman sailed from Batavia the 14th of August, 1642, discovered land in 42° south latitude, and about 155° east longitude from Paris, which he called Van Diemen's land: he sailed from thence to the east-ward, and in about 160° of our east longitude, he discovered New Zealand, in $42^{\circ} 10'$ south. He coasted it till to 34° south lat. from whence he sailed N. E. and discovered, in $22^{\circ} 35'$ south lat. and nearly 174° east of Paris, the isles of Pylstaart, Amsterdam, and Rotterdam.

He did not extend his researches any farther, and returned to Batavia, sailing between New Guinea and Gilolo.

The general name of New Holland has been given to a great extent of continent, or chain of islands, reaching from 6° to 34° south lat. between 105° and 140° east longitude from Paris. It was reasonable to give it the name of New Holland, because the different parts of it have chiefly been discovered by Dutch navigators. The first land which was found in these parts was called the Land of Eendragt, from the person [1] that discovered it in 1616, in 24° and 25° south latitude. In 1618, another part of this coast, situated nearly in 15° south, was discovered by Zeachen, who gave it the name of Arnhem and Diemen; though this is not the same with that which Tasman called Diemen's land afterwards.

1 Not from the discoverer, but from the ship Eendragt (Concord).

In 1619, Jan van Edels gave his name to a southern part of New Holland. Another part, situated between 30° and 33° , received the name of Leuwen. Peter van Nuitz communicated his name in 1627 to a coast which makes as it were a continuation of Leuwen's land to the westward.

William de Witts called a part of the western coast, near the tropic of Capricorn, after his own name, though it should have born that of captain Viane, a Dutchman, who paid dear for the discovery of this coast in 1628, by the loss of his ship, and of all his riches.

In the same year 1628, Peter Carpenter, a Dutchman, discovered the great Gulph of Carpentaria, between 10° and 20° south latitude, and the Dutch have often since sent ships to reconnoitre that coast.

Dampier, an Englishman, setting out from the great Timor Isle, made his first voyage in 1687, along the coasts of New Holland; and touched between the land of Arnhem and of Diemen: this first expedition was productive of no discovery. In 1699 he left England, with an express intention of visiting all that region, concerning which, the Dutch would not publish the accounts they had of it. He sailed along the western coast of it, from 28° to 15° . He saw the land of Eendragt, and of De Witt, and conjectured that there might exist a passage to the south of Carpentaria. He then returned to Timor, from whence he went out again, examined the Iles of Papua, coasted New Guinea, discovered the passage that bears his name, called a great isle which forms this passage or strait on the east side, New Britain, and sailed back to Timor along New Guinea. This is the same Dampier who between 1683 and 1691, partly as a freebooter or privateer, and partly as a trader, sailed round the world, by changing his ships.

This is the short abstract of the several voyages round the world, and of the various discoveries made in that vast Pacific Ocean before our departure from France. [1]

Before I begin the narrative of the expedition, with which I was charged, I must beg leave to mention, that this relation ought not to be looked upon as a work of amusement; it has chiefly been written for seamen. Besides, this long navigation round the globe does not offer such striking and interesting scenes to the polite world, as a voyage made in time of war. Happy, if by being used to composition, I could have learnt to counterbalance the dullness of the subject by elegance of style! But, though I was acquainted with the sciences from my very youth, when the lessons which M. d'Alembert was so kind to give me, enabled me to offer to the indulgent public, a work upon geometry, yet I am now far from the sanctuary of science and learning; the rambling and savage life I have led for these twelve years past, have had too great an effect upon my ideas and my style. One does not become a good writer in the woods of Canada, or on the seas, and I have lost a brother, whose productions were admired by the public, and who might have assisted me in that respect.

Lastly, I neither quote nor contradict any body, and much less do I pretend to establish or to overthrow any hypothesis; and supposing that the great differences which I have remarked in the various countries where I have touched at, had not been able to prevent my embracing that spirit of system-making, so peculiar in our present age, and however so incompatible with true philosophy, how could I have expected that my whim, whatever appearance of probability I could give it, should meet with success in the world?

1 The mistakes and omissions of our author in regard to these navigators of the South Seas, who did not sail round the world, are various and multifarious; but it would take up too much time to point them all out; and as there is a very complete list of all the navigators of the Pacific Ocean, in the *Historical collection of the several voyages and Discoveries in the South Pacific Ocean*, by Alex. Dalrymple, Esq, we refer our readers to it. F.

I am a voyager and a seaman; that is, a liar and a stupid fellow, in the eyes of that class of indolent haughty writers, who in their closets reason in *infinitum* on the world and its inhabitants, and with an air of superiority, confine nature within the limits of their own invention.

This way of proceeding appears very singular and inconceivable, on the part of persons who have observed nothing themselves, and only write and reason upon the observations which they have borrowed from those same travellers in whom they deny the faculty of seeing and thinking.

I shall conclude this preliminary discourse by doing justice to the zeal, courage, and unwearied patience of the officers and crew of my two ships. [1]

It has not been necessary to animate them by any extraordinary incitement, such as the English thought it necessary to grant to the crew of commodore Byron. Their constancy has stood the test of the most critical situations, and their good will has not one moment abated. But the French nation is capable of conquering the greatest difficulties, and nothing is impossible to their efforts, as often as she will think herself equal at least to any nation in the world.[2]

1 The officers on board the frigate la Boudeuse, were M. de Bougainville, captain of the ship; Duclos Guyot, captain of a fire-ship; chevalier de Bourmand, chevalier d'Oraison, chevalier du Bouchage, under-lieutenants (*enseignes de vaisseaux*) chevalier de Suzannet, chevalier de Kué, midshipman acting as officers; le Corre, super-cargo (*officier marchand*); Saint-Germain, ships-clerk; la Veze, the chaplain; la Porte, surgeon.

The officers of the store ship l'Etoile, consisted of M. M. Chenard de la Giraudais, captain of a fire-ship; Caro, lieutenant in an India-man; Donat, Landais, Fontaine, and Lavary-le-Roi, (*officiers marchands*); Michaud, ships clerk; Vivez, surgeon.

There were likewise M. M. de Commerçon, a physician; Verron, an astronomer, and de Romainville, an engineer.

2 It would be improper to derogate from the merit of any nation, unless that same nation intends to obtain it by destroying the character of another. Had Mr de Bougainville bestowed some encomiums upon the zeal and courage of the officers under his command, it would be thought that he were willing to do them justice: but since he, without the least necessity, casts a reflection on the English officers in commodore Byron's expedition, it is no more but justice to retort the argument. It is an undeniable proof of the badness of the constitution, and of the arbitrary government of this country, when a set of worthy men, who have braved the most imminent danger, with an undaunted courage, for the welfare of their fellow-citizens, remain without any reward whatsoever, except that philosophical one, the conscientiousness of good and laudable actions. But it is likewise the best proof of the happiness of the government and constitution: of a country, when merit and virtue is rewarded. These propositions are so evidently founded on truth, that they want no further confirmation: and every true Englishman will congratulate himself on the happiness to live under a government which thinks it a necessary duty to reward zeal, courage, and virtue, in a set of men who go through their duty with spirit and cheerfulness; and what honour must not redound on an administration which forces, even a rival nation, to give an honourable testimony to its attention in justly and conspicuously rewarding merit in its fellow-citizens, at the same time that these rivals endeavour to quiet the uneasy minds of their poor dissatisfied officers, with a vain and empty compliment. F.

PART the FIRST.
Departure from France—clearing the Straits of
Magalhaens.

CHAP. I.

Departure of the Boudeuse from Nantes; puts in at Brest; run from Brest to Montevideo; junction with the Spanish frigates, intended for taking possession of the Malouines, or Falkland's Islands.

Object of the voyage. November 1766.

IN February 1764, France began to make a settlement on the Isles Malouines. Spain reclaimed these, isles as belonging to the continent of South America and her right to them having been acknowledged by the king, I received, orders to deliver our settlement to the Spaniards, and to proceed to the East Indies by crossing the South Seas between the Tropics. For this expedition I received the command of the frigate la Boudeuse, of twenty-fix twelve-pounders, and I was to be joined at the Malouines by the store-ship l'Etoile, which was intended to bring me the provisions necessary for a voyage of such a length, and to follow me during the whole expedition. Several circumstances retarded the junction of this Store-vessel, and consequently made my whole voyage near eight months longer than it would otherwise have been.

In the beginning of November, 1766, I went to Nantes, where the Boudeuse had just been built, and where M. Duclos Guyot, a captain of a fire-ship, my second officer, was fitting her out. The 5th of this month we came down from Painbeuf to Mindin, to finish the equipment of her; and on the 15th we sailed from this road for the river de la Plata.

Departure from Nantes.

There I was to find the two Spanish frigates, called *la Esmeralda* and *la Liebre*, that had left Ferrol the 17th of October, and whose commander was ordered to receive the *Isles Molouines*, or Falkland's islands, in the name of his Catholic majesty.

Squall of Wind.

The 17th in the morning we suffered a sudden gust of wind from W. S. W. to N. W. it grew more violent in the night, which we passed under our bare poles, with our main-yards lowered, the clue of the fore-sail, under which we tried before, having been carried away. The 18th, at four in the morning, our fore-top-mast broke about the middle of its height; the main-top-mast resisted till eight o'clock, when it broke in the cap, and carried away the head of the main-mast.

Putting in at Brest.

This last event made it impossible for us to continue our voyage, and I determined to put into Brest, where we arrived the 21st of November.

This squall of wind, and the confusion it had occasioned, gave me room to make the following observations upon the state and qualities of the frigate which I commanded.

1. The prodigious tumbling home of her top-timbers, leaving too little opening to the angles which the shrouds make with the masts, the latter were not sufficiently supported.

2. The preceding fault became of more consequence by the nature of the ballast, which we had been obliged to take in, on account of the prodigious quantity of provisions we had stowed. Forty tuns of ballast, distributed on both sides of the keelson, and at a short distance from it, and a dozen twelve-pounders placed at the bottom of the pump-well (we had only fourteen upon deck) added a considerable weight, which being much below the center of gravity, and almost entirely rested upon the keelson, put the masts in danger, if there had been any rolling. These reflections induced me to get the excessive height of our masts shortened, and to exchange the cannon, which were twelve-pounders, for eight pounders. Besides the diminution of near twenty ton weight, both in the hold and upon deck, gained by exchanging the artillery, the narrow make of the frigate alone was sufficient to render it necessary. She wanted about two feet of the beam which such frigates have as are intended to carry twelve pounders. Notwithstanding these alterations, which I was allowed to make, I could not help observing that my ship was not fit for navigating in the seas round Cape Horn. I had found, during the squall of wind, that she made water from all her upper-works, which might expose part of my biscuit to be spoiled by the water getting into the store-rooms in bad weather; an inconvenience, the consequences of which we should not be able to remedy during the voyage. I therefore asked leave to send the *Boudeuse* back to France from the Falkland's islands, under the command of the chevalier Bournand, lieutenant of a ship, and to continue the voyage with the store-ship *L'Etoile* alone, if the long winter nights should prevent my passing the Straits of Magalhaens^[1] I obtained this permission, and the 4th of December, our masts being repaired, the artillery exchanged, and the frigate entirely caulked in her upper-works, we went out of the port and anchored in the road, where we continued a whole day, in order to embark the powder, and to set up the shrouds

December. Departure from Brest.

The 5th at noon we got under sail in the road of Brest. I was obliged to cut my cable, because the fresh east-wind and the ebb prevented my tacking about, as I was apprehensive of falling off too near the shore. I had eleven commissioned officers, and three volunteers; and the crew consisted of two hundred sailors, warrant-officers, soldiers, boys, and servants. The prince of Nassau-Siegen had got leave from the king to go upon this expedition. At four o'clock in the afternoon, the middle of the isle of Ushant bore N. by E. and from thence I took my departure.

Description of the Salvages.

During the first days, we had the wind pretty constant from W. N. W. to W.S. W. and S.W, very fresh. The 17th, afternoon, we got sight of the Salvages; the 18th, of the Isle of Palma; and the 19th, of the isle of Ferro. What is called the Salvages, is a little isle of about a league in extent from E. to W. it is low in the middle, and at each end a little hillock; a chain of rocks, some of which appear above water, extend to the westward about two leagues off the island; there are likewise some breakers on the east-side, but they are-not far from the shore.

1 Though the name of this circumnavigator is frequently spelled Magellan, it is however, right to spell proper names as they are written in their original language; according to this rule we shall always write Magalhaens. F.

Error in the calculation of the course.

The sight of these rocks convinced us of a great error in our reckoning; but I would not make a computation before I had seen the Canaries, whose position is exactly determined. The sight of the isle of Ferro gave me with certainty the correction which I was desirous to make. The 19th, at noon, I took the latitude, and comparing it with the bearings of the Isle of Ferro taken that same hour, I found a difference of four degrees and seven minutes, which I was more to the eastward, than by my reckoning. This error is frequent in crossing from Cape Finisterre to the Canaries, and I had found it on other voyages, as the currents opposite the straits of Gibraltar set to the eastward with great rapidity.

Position of the Salvages rectified.

I had, at the same time, an opportunity of remarking, that the Salvages are improperly placed on M. de Bellin's Chart. Indeed, when we got sight of them the 17th, after noon, the longitude which their bearings gave us differed from our calculation by three degrees seventeen minutes to the eastward. However, this same difference appeared the 19th of four degrees seven minutes, by correcting our place, according to the bearings of the isle of Ferro, whose longitude has been determined by astronomical observations. It must be observed, that during the two days which passed between our getting sight of the Salvages and of Ferro, we sailed with a fair wind; and consequently there can be very little miscalculation in that part of the course.

Besides, the 18th, we set the Isle of Palma bearing S. W. by W. corrected; and, according to M. Bellin, it was to bear S. W. I concluded, from these two observations, that M. Bellin has placed the Isle of Salvages about 32' more to the W. than it really is.

I therefore took a fresh departure the 19th of December at noon. We met with no remarkable occurrences on our voyage, till we came to the Rio de la Plata; our course furnished us only with the following observations, which may be interesting to navigators.

1767. January, Nautical observations.

1. The 6th and 7th of January 1767, being between 1° 40' and 0° 38' north latitude; and about 28° longitude, we saw many birds, which induced me to believe, that we were near the rock of Penedo San Pedro; though M Bellin does not mark it on his chart.

Passing of the line.

2. The 8th of January, in the afternoon, we passed the line between 27⁰ and 28° of longitude.

Remarks on the variations.

3. Since the 2d of January we could no longer observe the variations; and I only reckoned them by the charts of William Mountain and James Obson. The 11th, at sun-set, we observed 3° 17' of N. W. variation; and the 14th, in the morning, I observed again 10' of N. W. variation with an azimuth-compass, the ship then being in 10° 30' or 40' S. latitude, and about 33⁰ 20' W. longitude, from Paris. Therefore it is certain, that, if my estimated longitude is exact, and I verified it as such at the landfall [1], the line of no variation is still further advanced to the

1 Land-fall, *atterage*, the first land a ship makes after a sea-voyage. See Falconer's Marine Dictionary. F.

westward since the observation of Mountain and Obson; and it seems the progress of this line westward is pretty uniform. Indeed, upon the same degree of latitude, where Mountain and Obson found 12° or 13° of difference in the space of forty-four years, I have found a little more than 6° after an interval of 22 years. This progression deserves to be confirmed by a chain of observations. The discovery of the law by which these changes happen that are observed in the declination of the magnetic needle, besides furnishing us with a method of finding out the longitude at sea, might perhaps lead us to the causes of this variation, and perhaps even to that of the magnetic power.

Causes of the variations found in going to the Brasils.

4. About the line we have almost always observed very great variations on the north-side, though it is more common to observe them on the south-side. We had an opportunity of guessing at the cause of it, the 18th of January passing over a bank with young fish, which extended beyond the reach of our sight, from S. W. one quarter W. to N. E. one quarter E. upon a line of reddish white, about two fathoms broad. Our meeting with it, taught us that since some days the currents set in to the N. E. one quarter E, for all fish spawn upon the coasts, whence the currents detach the fry and carry them into the open sea. On observing these variations N. of which I have spoken, I did not infer from thence, that it was necessary there should be variations westward together with them; likewise the 29th of January, in the evening, when we saw land, I had calculated at noon that it was ten or twelve leagues off, which gave rise to the following observations.

It has long ago been a complaint among navigators, and still continues, that the charts, and especially those of M. Bellin, lay down the coasts of Brasil too much to the eastward. They ground this complaint upon their having got sight of these coasts in their several voyages, when they thought themselves at least eighty or a hundred leagues off. They add, that they have several times observed on these coasts, that the currents had carried them S.W. and they rather choose to tax the charts and astronomical observations as erroneous, than suspect their ships reckoning subject to mistakes.

Upon the like reasonings we might have concluded the contrary on our course to Rio de la Plata, if by chance we had not discovered the reason of the variations N. which we met with. It was evident that the bank with the fry of fish, that we met with the 29th, was subject to the direction of a current; and its distance from the coast proved, that the current had already existed several days. It was therefore the cause of constant errors in our course; and the currents which navigators have often found to set in to the S. W. on these shores, are subject to variations, and some-times take contrary directions.

This observation being well confirmed and our course being nearly S. W. were my authorities for correcting our mistakes as to the distances, making them agree with the observations of the latitude, and not to correct the points of the compass. By this method I got sight of the land, almost the same moment when I expected to see it by my calculation. Those amongst us, who always reckoned our course to the westward, according to the ship's journals, being contented to correct the difference of latitude by the observations at noon, expected to be close to the shore, according to their calculation, long before we had so much as got sight of it: but can this give them reason to conclude, that the coast of the Brasils is much more westward than Mr Bellin has laid it down.

Observations on the currents

In general it seems that in this part the currents vary, and sometimes set to the N. E. but more frequently to S. W. One glance at the bearings and position of the coast is sufficient to prove

that they can only follow one or the other of these directions; and it is always easy to distinguish which of the two then takes place by the differences north or south, which the latitude gives. To these currents we may impute the frequent errors of which navigators complain; and I am of opinion Mr. Bellin has laid down the coasts of the Brasils with exactness. I believe it the more readily, as the longitude of Rio Janeiro has been determined by Messrs. Godin, and the Abbe de la Caillé, who met there in 1751; and as some observations of the longitude have likewise been made at Fernambuco and Buenos Ayres. These three points being determined, there can be no considerable error in regard to the longitude of the eastern coasts of America, from 8° to 35° S. latitude; and this has been confirmed to us by experience.

Entry into Rio de la Plata.

Since the 27th of January we found ground, and on the 29th, in the evening, we saw the land, though we could not take the bearings, as night was coming on, and the shore very low. The night was dark, with rain and thunder. We lay-to under our reefed top-sails, the head towards the offing. On the 30th, by break of day, we perceived the mountains of Maldonado: it was then easily discovered that the land we saw the evening before, was the isle of Lobos. However, as our latitude, when we arrived, was $35^{\circ} 16' 20''$ we must have taken it for cape Santa Maria,

Necessary corrections in Mr Bellin's charts

which Mr. Bellin places in $35^{\circ} 15'$, though its true latitude is $34^{\circ} 55'$; I take notice of this false position, because it might prove dangerous. A ship sailing in $35^{\circ} 15'$ S. latitude, and expecting to find cape Santa Maria, might run the risk of getting upon the English Bank without having seen any land. However, the soundings would caution them against the approaching danger; for, near the sand, you find no more than six or seven fathoms of water. The French Bank, or Sand, which is no more than a prolongation of cape San Antonio, would be more dangerous; just before you come to the northern point of it, you find from twelve to fourteen fathoms of water.

Anchoring places at the Maldonados.

The Maldonados are the first high lands one sees on the north-side after entering the Rio de la Plata, and almost the only ones till you come to Montevideo. East of these mountains there is an anchorage upon a very low coast; it is a creek sheltered by a little island.

The Spaniards have a little town at the Maldonados, with a garrison. In its neighbourhood is a poor gold mine, that has been worked these few years; in it they likewise find pretty transparent stones. About two leagues inland is a town newly built, and entirely peopled with Portuguese deserters; it is called Pueblo Nuevo.

Anchoring at Montevideo.

The 31st, at eleven in the morning, we anchored in Montevideo bay, having four fathom water, with a black, soft, muddy bottom. We had passed the night between the 30th and 31st in nine fathoms, the same bottom, five or six leagues east of the isle of Flores. The two Spanish frigates, which were to take possession of the Isles Malouines (Falkland's island) had lain in the road a whole month.

February

Their commander, Don Philip Ruis Puente, captain of a man of war, was appointed governor of those islands; we went together to Buenos Ayres, in order to concert the necessary measures with the governor-general, for the cession of the settlement, which I was to deliver up to the Spaniards. We did not make a long stay there, and I returned to Montevideo on the 16th of February.

Journey from Buenos Ayres to Montevideo.

The prince of Nassau went with me, and as a contrary wind prevented our returning in a schooner, we landed opposite Buenos Ayres, above the colony of San Sacramento, and made this tour by land. We crossed those immense plains, in which travellers are guided by the eye, taking care not to miss the fords in the rivers, and driving before themselves thirty or forty horses, among which they must take some with nooses, in order to have relays, when those on which they ride are fatigued. We lived upon meat which was almost raw, and passed the nights in huts made of leather, in which our sleep was constantly interrupted by the howlings of tygers that lurk around them. I shall never forget in what manner we crossed the river St. Lucia, which is very deep, rapid, and wider than the Seine opposite the Hospital of Invalids at Paris. You get into a narrow, long canoe, one of whose sides is half as high again as the other; two horses are then forced into the water, one on the star-board, and the other on the larboard side of the canoe, and the master of the ferry, being quite naked, (which, though a very wise precaution, is insufficient to encourage passengers that cannot swim) holds up the horses heads as well as he can above the water, obliging them to swim over the river, and to draw the canoe, if they be strong enough for it.

Don Ruis arrived at Montevideo a few days after us. There arrived at the same time two boats laden, one with wood and refreshments, the other with biscuit and flour, which we took on board, in place of that which had been consumed on our voyage from Brest. The Spanish frigates being likewise ready, we prepared to leave Rio de la Plata.

CHAP. II.

Account of the establishment of the Spaniards in Rio de la Plata.

Incertainty concerning the source of this river.

R I O de la Plata, or the river of Plate, does not go by that same name from its source. It is said to spring from the lake Xaragès, near $16^{\circ} 30'$ south, under the name of Paraguai, which it communicates to the immense extent of land it passes through. In about 27^0 it joins with the river Parana, whose name it takes, together with its waters. It then runs due south to lat. 34° ; where it receives the river Uruguai, and directs its course eastward, by the name of la Plata, which, it keeps to the sea.

The Jesuit geographers, who were the first that attributed the origin of this great river to the lake of Xaragès, have been mistaken, and other writers have followed their mistake in this particular. The existence of this lake, which has been in vain sought for, is now acknowledged to be fabulous. The marquis of Valdelirais and Don George Menezès, having been appointed, the one by Spain and the other by Portugal, for settling the limits between the possessions of these two powers in this country, several Spanish and Portuguese officers went through the whole of this portion of America, from 1751 till 1755. Part of the Spaniards went up the river Paraguai, expecting by this means to come into the lake of Xaragès; the Portuguese on their part, setting out from Maragosso, a settlement of theirs upon the inner boundaries of the Brasils, in about 12° south latitude, embarked on a river called Caourou, which the same maps of the Jesuits marked, as falling into the lake of Xaragès. They were both much surprised at meeting in the river Paraguai, in 14^0 S. latitude, without having seen any lake. They proved, that what had been taken for a lake was a great extent of very low grounds, which, during a certain season, are covered by the inundations of the river.

Sources of the river Plata.

The Paraguai, or Rio de la Plata, arises between 5° and 6° S. latitude nearly in the middle between the two oceans, and in the same mountains whence the Madera comes, which empties itself into the river of Amazons. The Parana and Uruguai arise both in the Brasils; the Uruguai in the captainship of St. Vincent; the Parana near the Atlantic ocean, in the mountains that lie to the E. N. E. of Rio Janeiro, whence it takes its course to the westward, and afterwards turns south.

Date of the first settlements of the Spaniards there.

The abbé Prevost has given the history of the discovery of the Rio de la Plata, and of the obstacles the Spaniards met with, in forming the first settlements they made there. It appears from his account that Diaz de Solis first entered this river in 1515, and gave his name to it, which it bore till 1526, when Sebastian Cabot changed it to that of la Plata, or of Silver, on account of the quantity of that metal he found among the natives there. Cabot built the fort of Espiritù Santo, upon the river Tercero, thirty leagues above the junction of the Paraguai and Uruguai; but this settlement was destroyed almost as soon as it was constructed.

Don Pedro de Mendoza, great cup-bearer to the emperor, was then sent to the river of Plate in 1535. He laid the first foundations of Buenos Ayres, under bad auspices, on the right hand shore of the river, some leagues below its junction with the Uruguai, and his whole expedition was a chain of unfortunate events, that did not even end at his death.

The inhabitants of Buenos Ayres, being continually interrupted by the Indians, and constantly oppressed by famine, were obliged to leave the place and to retire to Assumption. This town, now the capital of Paraguai, was founded by some Spaniards, attendants of Mendoza, upon the western shore of the river, three hundred leagues from its mouth, and was in a very short space of time considerably enlarged. At length Don Pedro Ortiz de Zarata, governor of Paraguay, rebuilt Buenos Ayres in 1580, on the same spot where the unhappy Mendoza had formerly laid it out, and fixed his residence there: the town became the staple to which European ships resorted, and by degrees the capital of all these tracts, the see of a bishop, and the residence of a governor-general.

Situation of the town of Buenos Aryes.

Buenos Ayres is situated in $34^{\circ} 35'$ south latitude; its longitude is $61^{\circ} 5'$ west from Paris, according to the astronomical observations of father Feuillée. It is built regular, and much larger than the number of its inhabitants would require, which do not exceed twenty thousand, whites, negroes, and mestizos. The way of building the houses gives the town this great extent; for, if we except the convents, public buildings, and five or six private mansions, they are all very low, and have no more than a ground-floor, with vast court-yards, and most of them a garden. The citadel, which includes the governor's palace, is situated upon the shore of the river, and forms one of the sides of the great square, opposite to which the town-hall is situated the cathedral and episcopal palace occupy the two other sides of the square, in which a public market is daily held.

This town wants a harbour.

There is no harbour at Buenos Ayres, nor so much as a mole, to facilitate the landing of boats. The ships can only come within three leagues of the town; there they unload their goods into boats, which enter a little river, named Rio Chuelo, from whence the merchandizes are brought in carts to the town, which is about a quarter of a league from the landing-place. The ships which want careening, or take their lading at Buenos Ayres, go to la Ençenada de Baragon, a kind of port about nine or ten leagues E. S. E. of this town.

Religious establishments.

Buenos Ayres contains many religious communities of both sexes. A great number of holidays are yearly celebrated by processions and fireworks. The monks have given the title of Majordomes or Stewards of the founders of their orders, and of the holy Virgin, to the principal ladies in this town. This post gives them the exclusive charge of ornamenting the church, dressing the statue of the tutelar saint, and wearing the habit of the order. It is a singular sight for a stranger to see ladies of all ages in the churches of St. Francis and St. Dominique assist in officiating, and wear the habit of those holy institutors.

The Jesuits have offered a much more austere mode of sanctification than the former to the pious ladies. Adjoining to their convent, they had a house, called Casa de los Exercicios de las Mugeris, i.e. the house for the Exercises of Women. Married and unmarried women, without the consent of their husbands or parents, went to be sanctified there by a retreat of twelve days. They were lodged and boarded at the expence of the community. No man was admitted into

this sanctuary, unless he wore the habit of St. Ignatius even servant-maids were not allowed to attend their mistresses thither. The exercises practised in this holy place were meditation, prayer, catechetical instructions, confession, and flagellation. They shewed us the walls of the chapel, yet stained with the blood, which, as they told us, was dispersed by the rods wherewith penitence armed the hands of these Magdalens.

All men are brothers, and religion makes no distinction in regard to their colour. There are sacred ceremonies for the slaves, and the Dominicans have established a religious community of negroes. They have their chapels, masses, holidays, and decent burials, and all this costs every negro that belongs to the community only four reals a year. This community of negroes acknowledges St. Benedict of Palermo, and the Virgin, as their patrons, perhaps on account of these words of scripture; "Nigra sum, sed formosa filia Jerusalem." On the holidays of these tutelary faints, they chuse two kings, one to represent the king of Spain, the other the Portugueze monarch, and each of them chooses a queen. Two bands, armed and well dressed, form a procession, and follow the kings, marching with the cross, banners, and a band of music. They sing, dance, represent battles between the two parties, and repeat litanies. This festivity lasts from morning till night, and the sight of it is diverting.

Environs of Buenos Ayres and their productions.

The environs of Buenos Ayres are well cultivated. Most of the inhabitants of that city have their country-houses there, called Quintas, furnishing all the necessaries of life in abundance. I except wine, which they get from Spain, or from Mandoza, a vineyard about two hundred leagues from Buenos Ayres. The cultivated environs of this city do not extend very far; for at the distance of only three leagues from the city, there are immense fields, left to an innumerable multitude of horses and black cattle. One scarce meets with a few scattered huts, on crossing this vast country, erected not so much with a view of cultivating the soil, as rather to secure the property of the ground, or of the cattle upon it to their several owners. Travellers, who cross this plain, find no accommodations, and are obliged to sleep in the same carts they travel in, and which are the only kind of carriages made use of on long journeys here. Those who travel on horseback are often exposed to lie in the fields, without any covering.

Abundance of cattle.

The country is a continued plain, without other forests than those of fruit trees. It is situated in the happiest climate, and would be one of the most fertile in the world in all kinds of productions, if it were cultivated. The small quantity of wheat and maize which is sown there, multiplies by far more than in our best fields in France. Notwithstanding these natural advantages, almost the whole country lies neglected, as well in the neighbourhood of the Spanish settlements, as at the greatest distance from them; or, if by chance you meet with any improvements, they are generally made by negro-slaves. Horses and horned cattle are in such great abundance in these plains, that those who drive the oxen before the carts, are on horseback; and the inhabitants, or travellers, when pressed by hunger, kill an ox, take what they intend to eat of it, and leave the rest as a prey to wild dogs and tygers [1], which are the only dangerous animals in this country.

1 It is now certain, that the animal, here called the tyger, is the Couguara or Brown (tyger) Cat, of Penn.Syn. quad. p.179. a very large animal, and very fierce in hot countries. F.

The dogs were originally brought from Europe: the ease with which they are able to get their livelihood in the open fields has induced them to leave the habitations, and they have encreased their species innumeraibly. They often join in packs to attack a wild bull, and even a man on horseback, when they are pressed by hunger. The tygers are not numerous, except in woody parts, which are only to be found on the banks of rivulets. The inhabitants of these countries are known to be very dexterous in using nooses; and it is fact, that some Spaniards do not fear to throw a noose, even upon a tyger; though it is equally certain that some of them unfortunately became the prey of these ravenous creatures. At Montevideo, I saw a species of tyger-cat, whose hairs were pretty long, and of a whitish grey. The animal is very low upon its legs, about five feet long, fierce, and very scarce.

Scarcity of wood; means of remedying it.

Wood is very dear at Buenos Ayres, and at Montevideo. In the neighbourhood of these places, are only some little shrubs, hardly fit for fuel. All timber for building houses, and constructing and refitting the vessels that navigate in the river, comes from Paraguay in rafts. It would, however, be easy to get all the timber for constructing the greatest ships from the upper parts of the country. From Montegrande, where they have the finest wood, it might be transported in single round stems, through the river Ybicui, into the Uruguai, and from the Salto-Chico of the Uruguai, some vessels made on purpose for this use, might bring it to such places upon the river, where docks were built.

Account of the natives of this country.

The Indians, who inhabit this part of America, north and south of the river de la Plata, are of that race called by the Spaniards Indios bravos.—They are middle-sized, very ugly, and afflicted with the itch. They are of a deep tawny colour, which they blacken still more, by continually rubbing themselves with grease. They have no other dress than a great cloak of roe-deer skins, hanging down to their heels, in which they wrap themselves up. These skins are very well dressed; they turn the hairy side inwards, and paint the outside with various colours. The distinguishing mark of their cacique is a band or strap of leather, which is tied round his forehead; it is formed into a diadem or crown, and adorned with plates of copper. Their arms are bows and arrows; and they likewise make use of nooses and of balls [1]

These Indians are always on horseback, and have no fixed habitations, at least not near the Spanish settlements. Sometimes they come with their wives to buy brandy of the Spaniards; and they do not cease to drink of it, till they are so drunk as not to be able to stir. In order to get strong liquors, they sell their arms, furs, and horses; and having disposed of all they are possessed of, they seize the horses they can meet with near the habitations, and make off. Sometimes they come in bodies of two or three hundred men, to carry of the cattle from the lands of the Spaniards, or to attack the caravans of travellers. They plunder and murder, or carry them into slavery. This evil cannot be remedied; for, how is it possible to conquer a nomadic nation, in an immense uncultivated country, where it would be difficult even to find

1 These balls are two round stones, of the size of a two-pound ball, both enchased in a strap of leather, and fastened to the extremities of a thong, six or seven feet long. The Indians, when on horseback, use this weapon as a sling, and often hit the animal they are pursuing, at the distance of three hundred yards.

them: besides, these Indians are brave and inured to hardships; and those times exist no longer, when one Spaniard could put a thousand Indians to flight.

Race of robbers settled on the north side of the river.

A set of robbers united into a body, a few years ago, on the north side of the river, and may become more dangerous to the Spaniards than they are at present, if efficacious measures are not taken to destroy them. Some malefactors escaped from the hands of justice, retired to the north of the Maldonados; some deserters joined them; their numbers increased insensibly; they took wives from among the Indians, and founded a race of men who live upon robberies. They make inroads, and carry off the cattle in the Spanish possessions, which they conduct to the boundaries of the Brasils, where they barter it with the Paulists [1], against arms and clothes. Unhappy are the travellers that fall into their hands. They are now, it is said, upwards of six hundred in number, have left their first habitation, and are retired much further to the north-west.

Extent of the government de la Plata.

The governor-general of the province de la Plata resides, as I have already mentioned, at Buenos Ayres. In all matters which do not concern the marine, he is reckoned dependent upon the viceroy of Peru; but the great distance between them almost annuls this dependency, and it only exists in regard to the silver, which he is obliged to get out of the mines of Potosi; this, however, will no longer be brought over in shapeless pieces, as a mint has been established this year at Potosi. The particular governments of Tucuman and Paraguai. (The principal settlements of which are Santa-Fé, Corrientes, Salta, Tujus, Cordoua, Mendoza, and Assumption) are dependent, together with the famous missions of the Jesuits upon the governor-general of la Plata. This vast province contains, in a word, all the possessions of the Spaniards, east of the Cordilleras, from the river of Amazons to the straits of Magalhaens. It is true, there is no settlement south of Buenos Ayres; and nothing but the necessity of providing themselves with salt, induces the Spaniards to penetrate into those parts. For this purpose a convoy of two hundred carts, escorted by three hundred men, sets out every year from Buenos Ayres, and goes to the latitude of forty degrees, to load the salt in lakes near the sea, where it is naturally formed. Formerly the Spaniards used to send schooners to the bay of St. Julian, to fetch salt.

I shall speak of the missions in Paraguay when I come to the second voyage, which some circumstances obliged us to make again into the river of la Plata; I shall then enter into the account of the expulsion of the Jesuits, of which we were witnesses.

The commerce of the province de la Plata is less profitable than any in Spanish America; this province produces neither gold nor silver, and its inhabitants are not numerous enough to be able to get at all the other riches which the soil produces and contains. The commerce of Buenos Ayres itself is not in the same state it was in about ten years ago; it is fallen off considerably, since the trade by land is no longer permitted; that is, since it has been prohibited to carry European goods by land from Buenos Ayres to Peru and Chili; so that the only objects of

1 The Paulists are another race of robbers, who left Brasil, and formed a republic, towards the end of the sixteenth century.

the commerce with these two provinces are, at present, cotton, mules, and maté, or the Paraguay-herb. [1] The money and interest of the merchants at Lima have obtained this order, against which those of Buenos Ayres have complained. The lawsuit is carried on at Madrid, and I know not how or when it will be determined. However, Buenos Ayres is a very rich place: I have seen a register-ship sail from thence, with a million of dollars on board; and if all the inhabitants of this country could get rid of their leather or skins in Europe, that article alone would suffice to enrich them. Before the last war, they carried on a prodigious

Colony of Santa Sacramento.

contraband-trade with the colony of Santo Sacramento, a place in the possession of the Portuguese, upon the left side of the river, almost directly opposite Buenos Ayres. But this place is now so much surrounded by the new works, erected by the Spaniards, that it is impossible to carry on any illicit trade with it, unless by connivance; even the Portuguese, who inhabit the place, are obliged to get their subsistence by sea from the Brafilis. In short, this nation bears the same relation to Spain here, as Gibraltar does in Europe; with this difference only, that the former belongs to the Portuguese, and the latter to the English.

1 Maté, or Paraguay-tea, or South-sea-tea, are pounded dry leaves of a plant growing in South America, and chiefly in Paraguay. The Jesuits when in possession of the interior parts of the provinces of Paraguay got, by a manoeuvre similar to that of the Dutch, in regard to the spice-trade, the exclusive commerce of this commodity. They cultivated this plant in enclosures, upon the rivers Uruguay and Parana, and wherever it grew wild, it destroyed and after the space of nineteen years they became the sole masters of this trade, which was very lucrative; for as this plant is thought to be an excellent restorative and a good paregoric, and therefore of indispensable necessity to the workmen in the famous Peruvian mines, it is carried constantly to Peru and Chili; the whole consumption of it being yearly upon an average of 160,000 arrobas: of 25 pounds Spanish weight each; and price is, at a medium, thirty-six piasters per arroba so that this plant was worth to the Jesuits 5,760,000 piastres per ann. the tenth part of which sum must be deducted out of the whole, for instruments of agriculture, the erection and repairing of buildings necessary for manufacturing this plant, feeding and cloathing of about 300,000 Indians and Negros; so that still above five millions of piastres were the clear yearly profit of the pious fathers. these cunning men sold these leaves in powder on purpose that no botanist might get a sight of them, and thus be enabled to find out the plant to which the leaves belong, in case some plants should have escaped their selfish destruction of them. Some writers call this plant Maté, which is I believe, the name of the vessel it is drunk out of. Others call it Caa, and make this the generic name of it, and its species are Caa-cuys, Caa mini, and Caa-guaz, the last of which is the coarsest sort prepared, with the stalks, left to it, for this reason it is likewise called Yerva de Pales; but the Caa-mini or Yerva de Caamini is the best sort and sold dearer; the Caa-cuys will not keep for so long as the other two sorts. This plant is thought to be the *Ilex Caffine*, Linn. sp. pl. p. 181. or the Dahoon-holly. Forster's *Flora Americ. Septentr.* p.7. and Catesby *car.L.i.t.* 31 F.

Account of the town of Montevideo.

The town of Montevideo has been settled forty years ago, is situated on the north side of the river, thirty leagues above its mouth, and built on a peninsula, which lies convenient to secure from the east wind, a bay of about two leagues deep, and one league wide at its entrance.

At the western point of this isle, is a single high mountain, which serves as a look-out, and has given a name to the town; the other lands, which surround it, are very low. That side which looks towards a plain, is defended by a citadel. Several batteries guard the side towards the sea

Anchorage in this bay.

and the harbour. There is a battery upon a very little isle, in the bottom of the bay, called Isle au François, or French- Island. The anchorage at Montevideo is safe, though sometimes molested by pamperos, which are storms from the south-west, accompanied by violent tempests. There is no great depth of water in the whole bay; and one may moor in three, four, or five fathoms of water in a very soft mud, where the biggest merchant-ships run a-ground, without receiving any damage; but sharp-built ships easily break their backs, and are lost. The tides do not come in regular; according as the wind is, the water is high or low. It is necessary to be cautious, in regard to a chain of rocks that extends some cables-length off the east point of the bay; the sea forms breakers upon them, and the people of this country call them la Punta de las Carretas.

It is an excellent place to put in at for refreshments.

Montevideo has a governor of its own, who is immediately under the orders of the governor-general of the province. The country round this town is almost entirely uncultivated, and furnishes neither wheat nor maize; they must get flour, biscuit, and other provisions for the ships from Buenos Ayres. In the gardens belonging to the town, and to the adjoining houses, they cultivate scarce any legumes; there is, however, plenty of melons, calabashes, figs, peaches, apples, and quinces. Cattle are as abundant there as in any other part of this country; which, together with the wholesomeness of the air, makes Montevideo an excellent place to put in at for the crew; only good measures must be taken to prevent defection. Every thing invites the sailor thither; it being a country, where the first reflection which strikes him, on setting his feet on shore, is, that they live there almost without working. Indeed, how is it possible to resist the comparison of spending one's days in idleness and tranquillity, in a happy climate, or of languishing under the weight of a constantly laborious life, and of accelerating the misfortunes of an indigent old age, by the toils of the sea?

CHAP. III

Departure from Montevideo; navigation to the Malouines; delivery of them into the hands of the Spaniards; historical digression on the subject of these islands.

1767, February.

THE 28th of February, 1767, we weighed from Montevideo, in company with two Spanish frigates, and a tartane laden with cattle. I agreed with Don Ruis, that while we were in the river,

Departure from Montevideo.

he should lead the way; but that as soon as we were got out to sea, I was to conduct the squadron. However, to obviate the dangers in case of a separation, I gave each of the frigates a pilot, acquainted with the coasts of the Malouines. In the afternoon we were obliged to come to an anchor, as a fog prevented our seeing either the main land, or the isle of Flores. The next morning we had contrary wind; however, I expected that we should have weighed, as the strong currents in the river favoured us; but seeing the day almost at an end, without any signal being given by the Spanish commodore I sent an officer to tell him, that having had a sight of the isle of Flores, I found myself too near the English sand-bank, and that I advised we should weigh the next day, whether the wind was fair or not. Don Ruis answered, that he was in the hands of the pilot or the river, who would not weigh the anchor till we had a settled fair wind. The officer then informed him from me, that I should sail by day-break; and that I would wait for him, by plying to windward, or by anchoring more to the north, unless the tides or the violence of the wind should separate us against my will.

The tartane had not cast anchor the last night; and we lost sight of her, and never saw her again. She returned to Montevideo three weeks after, without fulfilling its intended expedition.

Storm in the river.

The night was stormy; the pamperos blew very violently, and made us drag our anchor; however, we cast another anchor, and that fixed us. By day-break we saw the Spanish ships, with their top-masts handed, main-yards lowered, and had dragged their anchors much further than ourselves. The wind was still contrary and violent, the sea very high, and it was nine o'clock before we could proceed under our main-sails; at noon we lost sight of the Spaniards,

March.

who remained at anchor, and the third of March in the evening we were got out of the river.

Voyage from Montevideo to the Malouines.

During our voyage to the Malouines, we had variable winds from N. W. to S. W. almost always stormy weather and high seas: we were obliged to try under our main-sail on the 16th, having suffered some damage. Since the 17th in the afternoon, when we came into soundings, the weather was very foggy. The 19th, not seeing the land, though the horizon was clear, and I was east of the Sebald's isles by my reckoning, I was afraid I had gone beyond the Malouines, and therefore resolved to sail westward; the wind, which is a rare circumstance, favoured my resolution. I proceeded very fast in twenty-four hours, and having then found the soundings off the coast of Patagonia, I was sure as to my position, and so proceeded again very confidently to the eastward. Indeed, the 21st, at four o'clock in the afternoon, we discovered the Sebald's isles,

Fault committed in the direction of this course.

remaining in N. E. 1/4. E. eight or ten leagues distant, and soon after we saw the coast of the Malouines. I could have spared myself all the trouble I had been in, if I had in time sailed close-hauled, in order to approach the coast of America, and so find the islands by their latitude.

The 23d in the evening we entered and anchored in the great bay, where the two Spanish frigates likewise came to an anchor on the 24th. They had suffered greatly during their course; the storm on the 16th having obliged them to bear away; and the commodore-ship, having shipped a sea, which carried away her quarter-badges, broke through the windows of the great cabin, and poured a great quantity of water into her. Almost all the cattle they took on board at Montevideo for the colony, died through the badness of the weather. The twenty-fifth the three vessels came into port, and moored.

The Spaniards take possession of the settlement at the Malouines.

April

The first of April I delivered our settlement to the Spaniards, who took possession of it, by planting the Spanish colours, which were saluted at sun-rising and sun-setting from the shore and from the ships. I read the kings letter to the French inhabitants of this infant colony, by which his majesty permits their remaining under the government of his most catholic majesty. Some families profited of this permission; the rest, with the garrison, embarked on board the Spanish frigates, which sailed for Montevideo the 27th in the morning. [1]

Historical details concerning the Malouines.

Americo Vespucci discovers them.

Some historical remarks concerning these isles, will, I hope, not be deemed unnecessary. It appears to me, that the first discovery of them may be attributed to the celebrated Americo Vespucci, who, in the third voyage for the discovery of America, sailed along the northern coast of them in 1502. It is true, he did not know whether it belonged to an isle, or whether it was part of the continent; but it is easy to conclude, from the course he took, from the latitudes he came to, and from the very description he gives of the coasts, that it is that of the Malouines. I shall assert with equal right, that Beauchesne Gouin, returning from the South Seas in 1700, anchored on the east side of the Malouines, thinking he was at the Sebald's isles.

1 When I delivered the settlement to the Spaniards, all the expense, whatsoever, which it had cost till the first of April 1767, amounted to 603,000 livres, including the interest of five per cent, on the sums expended since the first equipment. France having acknowledged the catholic kings right to the Malouines, he, by a principle of the law of nations, owed no reimbursements to these costs. However, as his majesty took all the ships, boats, goods, arms, ammunition, and provisions that belonged to our settlement, he being equally just and generous, desired that we should be reimbursed for what we had laid out; and the above sum was remitted to us by his treasurers; part at Paris, and the rest at Buenos Ayres.

His account says, that after discovering the isle to which he gave his own name, he anchored on the east side of the most easterly of Sebald's isles. I must first of all observe, that the Malouines, being in the middle between the Sebald's isles and the isle of Beauchesne, have a considerable extent, and that he must have necessarily fallen in with the coast of the Malouines, as is impossible not to see them, when at anchor eastward of the Sebald's isles. Besides, Beauchesne saw a single isle of an immense extent; and it was not till after he had cleared it, that he perceived two other little ones: he passed through a moist country, filled with marches and fresh-water lakes, covered with wild-geese, teal, ducks, and snipes; he saw no woods there; all this agrees prodigiously well with the Malouines. Sebald's isles, on the contrary, are four little rocky isles, where William Dampier, in 1683, attempted in vain to water, and could not find a good anchoring-ground.

Be this as it will, the Malouines have been little known before our days—Most of the relations report them as isles covered with woods. Richard Hawkins, who came near the northern coast of them, which he called Hawkins's Maiden-land, and who pretty well described them, asserts that they were inhabited, and pretends to have seen fire there. At the beginning of this century, the *St. Louis*, a ship from *St. Malo*, anchored on the south-east side, in a bad bay, under the shelter of some little isles, called the isles of Anican, after the name of the privateer; but he only stayed to water there, and continued his course, without caring to survey them.

The French settle there.

However, their happy position, to serve as a place of refreshment or shelter to ships going to the South-Seas, struck the navigators of all nations. In the beginning of the year 1763, the court of France resolved to form a settlement in these isles. I proposed to government, that I would establish it at my own expense, assisted by Messrs. de Nerville and d'Arboulain, one my cousin-german, the other my uncle. I immediately got the *Eagle* of twenty guns, and the *Sphinx* of twelve, constructed and furnished with proper necessaries for such an expedition, by the care of M. Duclos Guyot, now my second. I embarked several Acadian families, a laborious intelligent set of people, who ought to be dear to France, on account of the inviolable attachment they have shewn, as honest but unfortunate citizens.

The 15th of September I sailed from *St. Malo*. M. de Nerville was on board the *Eagle* with me. After touching twice, once at the isle of *St. Catharine*, on the coast of the *Brasils*, and once at *Montevideo*, where we took in many horses and horned cattle, we made the land of Sebald's isles the 31st of January, 1764. I sailed into a great bay, formed by the coast of the Malouines, between its N. W. point, and Sebald's isles; but not finding a good anchoring ground, sailed along the north coast; and, coming to the eastern extremity of these isles, I entered a great bay on the third of February, which seemed very convenient to me, for forming the first settlement

Account of the manner in which it was made.

The same illusion which made Hawkins, Woods Rogers, and others, believe that these isles were covered with wood, acted likewise upon my fellow voyagers. We were surprised, when we landed, to see that what we took for woods as we sailed along the coast, was nothing but bushes of a tall rush, standing very close together. The bottom of stalks being dried, got the colour of a dead leaf to the height of about five feet; and from thence springs a tuft of rushes, which crown this stalk; so that at a distance these stalks together have the appearance of a wood of middling height. These rushes only grow near the sea side, and on little isles; the mountains on the main land are, in some parts, covered all over with heath, which are easily mistaken for bushes.

In the various excursions, which I immediately ordered, and partly made in the island myself, we did not find any kind of wood; nor could we discover that these parts had been frequented by any nation.

I only found, and in great quantity too, an exceeding good turf, which might supply the defect of wood, both for fuel, and for the forge; and I passed through immense plains, every where intersected by little rivulets, with very good water. Nature offered no other subsistence for men than fish and several sorts of land and water fowl. It was very singular, on our arrival, to see all the animals, which had hitherto been the only inhabitants of the island, come near us without fear, and shew no other emotions than those which curiosity inspires at the sight of an unknown object. The birds suffered themselves to be taken with the hand, and some would come and settle upon people that stood still; so true it is, that man does not hear a characteristic mark of ferocity, which mere instinct is capable of pointing out to these weak animals, the being that lives upon their blood. This confidence was not of long duration with them; for they soon learnt to mistrust their most cruel enemies.

First year.

The 17th of March, I fixed upon the place of the new colony, which at first was only composed or twenty seven persons, among whom were five women, and three children. We set to work immediately in build them huts covered with rushes, to construct a magazine, and a little fort, in the middle of which a small obelisk was erected. The king's effigy adorned one of its sides, and under its foundations we buried some coins, together with a medal, on one side of which was graved the date of the undertaking, and on the other the figure of the king, with these words for the exergue, "Tibi serviat ultima Thule." [1]

However, to encourage the colonists, and encrease their reliance on speedy assistance, which I promised them, M. de Nerville consented to remain at their head, and to share the risks to which this weak settlement was exposed, at the extremity of the globe, where it was at that time the only one in such a high southern latitude, The firth of April, 1764, I solemnly took possession of the isles in the king's name, and the eighth I sailed for France.

Second year.

The fifth of January, 1765 I saw my colonists; again, and found them healthy and content. After landing what I had brought to their assistance, I went into the straits of Magalhaens, to get a cargo of timber, palisadoes and young trees, and I began a navigation, which is become necessary to the colony. Then I found the ships of commodore Byron, who, after surveying the

1 The inscription on this medal was as follows.

Settlement of the Isles Malouines, situated in 51⁰ 30' of S. latitude, 60⁰ 50' W. long, from the meridian of Paris by the Eagle frigate, captain P. Duclos Guyot, captain of a fire ship, and the Sphinx sloop; captain F. Chenard de la Giraudais, lieutenant of a frigate, equipped by Louis Antoine de Bougainville, colonel of infantry, captain of a ship, chief of the expedition, G. de Nerville, captain of infantry, and P. d'Arboulin, post-master general of France: construction of a fort, and an obelisk, decorated with a medallion of his majesty Louis XV. after the plans of A. L'Huillier, engineer and geographer of the field and army, serving on this expedition of E. de Choiseul, duke of Stainville, in February, 1764.

And the exergue. Conamur tenues grandia.

Malouines for the first time, passed the straits, in order to get into the South-seas. When I left the Malouines the 27th of April following, the colony consisted of twenty-four persons, including the officers.

In 1765 we sent back the Eagle to the Malouines and the king sent the Etoile, one of his store ships, with her. These two vessels, after landing the provisions and new colonists, sailed together to take in wood in the straits of Magalhaens. The settlement now began to get a kind of form. The governor and the ordonateur [1] lodged in very convenient houses built of stone, and the other inhabitants lived in houses of which the walls were made of sods. There were three magazines, both for the public stores, and those of private persons, The wood out of the straits had served to build several vessels, and to construct schooners for the purpose of surveying the coast. The Eagle returned to France from this last voyage, with a cargo of train oil and seals-skins, tanned in the island. Several trials had been made towards cultivation, which gave no reason to despair of success, as the greatest part of the corn brought from Europe was easily naturalized to the country. The encrease of the cattle could be depended upon, and the number of inhabitants amounted then to about one hundred and fifty.

However, as I have just mentioned, commodore Byron came in January, 1765, to survey the Malouines. He touched to the westward of our settlement, in a port which we had already named Port de la Croisade, and he took possession of these islands for the crown of England, without leaving a single inhabitant there. It was not before 1766, that the English sent a colony to settle in Port de la Croisade, which they had named Port Egmont; and captain Macbride, of the Jason frigate, came to our settlement the same year, in the beginning of December. He pretended that these parts belonged to his Britannic majesty, threatened to land by force, if he should be any longer refused that liberty, visited the governor, and sailed away again the same day.

Such was the state of the Malouines, when we put them into the hands of the Spaniards, whose prior right was thus in forced by that which we possessed by making the first settlement [2]

1 An officer who has the care of the stores.

2 The author has on purpose omitted to mention, that the English are the full discoverers of these isles. Captain Davis, in the expedition of 1592, under the command of Mr Thomas Cavendish, saw them; and so did Sir Richard Hawkins two years after in 1594, called them Hawkins's Maiden Land. In the year 1598 they were seen by the Dutchman Sebald de Waert, and called Sebald's isles and with that name they were put in all Dutch charts. Dampier discovered them likewise in 1683, but suspected they had no water. Strong gave these isles, in the year 1689, the name of Falkland-Islands, which was adopted by the celebrated astronomer Halley, and is now become of universal use in all our maps and charts. The privateers in the times of the wars of king William and queen Mary frequently saw these isles, and no sooner than in 1699-1700 they were seen for the first time by a Frenchman called Beauchesne Gouin. It is pretty evident from this account that the English have an undoubted prior claim to these barren rocks and marches, situated in a cold climate, subject to the severest rigour of winter, without the benefit of woods to alleviate them; and of which, was it not for the wretched fuel of turf, all the French, English and Spanish settlements would have been starved with cold. F.

The account of the productions of these isles, and the animals which are to be found there, will furnish matter for the following chapter, and are the result of the observations of M. de Nerville, during a residence of three years. I believed it was so much more proper to enter upon this detail as M. de Commerçon has not been at the Malouines, and as their natural history is in some regards important [2]

2 The Work which I now publish was already finished, when the History of a Voyage to the Malouines, by Dom Pernetty, appeared, otherwise I should have omitted the following accounts.

CHAP. IV.

Detail of the natural history of the Isles Malouines.

A Country which has been but lately inhabited always offers interesting objects, even to those who are little versed in natural history; and though their remarks may not be looked upon as authorities, yet they may satisfy, in part, the curiosity of the investigators of the system of nature.

First aspect they bear.

The first time we landed upon these isles, no inviting objects came in sight, and, excepting the beauty of the port in which we lay, we knew not what could prevail upon us to stay on this apparently barren ground: the horizon terminated by bald mountains, the land lacerated by the sea, which seems to claim the empire over it; the fields bearing a dead aspect, for want of inhabitants; no woods to comfort those who intended to be the first settlers; a vast silence, now and then interrupted by the howls of marine monsters; and, lastly, the sad uniformity which reigned throughout; all these were discouraging objects, which seemed that in such dreary places nature would refuse assistance to the efforts of man. But time and experience taught us, that labour and constancy would not be without success even there. The resources with which nature presented us, were immense bays, sheltered from the violence of the winds by mountains, which poured forth cascades and rivulets; meadows covered with rich pastures, proper for the food of numerous flocks; lakes and pools to water them; no Contests concerning the property of the place; no fierce, or poisonous, or importune animals to be dreaded; an innumerable quantity of the most useful amphibia; birds and fish of the best taste; a combustible substance to supply the defect of wood; plants known to be species against the diseases common to seafaring men; a healthy and continually temperate climate, much more fit to make men healthy and robust, than those enchant-countries, where abundance itself becomes noxious, and heat causes a total inactivity. These advantages soon expunged the impressions which the first appearance had made, and justified the attempt, To this we may add, that the English in their relation of Port Egmont, have not scrupled to say, that the Countries adjacent furnished every thing necessary for a good settlement. Their taste for natural history will, without doubt, engage them to make and to publish enquiries which will rectify these.

Geographical situation of the Malouines.

The Malouines are situated between 51° and $52^{\circ} 30'$ S. lat. and $65^{\circ} 30'$ W. long. from Paris; and between 80 and 90 leagues distant from the coast of America or Patagonia, and from the entrance of the straits of Magalhaens.

The map which we give of these islands, has certainly not a geographical accuracy, which must have been the work of many years. It may, however, serve to indicate nearly the extent of these isles from east to west, and from north to south; the position of the coasts, along which our ships have sailed; the figure and depth of the great bays, and the direction of the principal mountains. [1]

1 As M. de Bougainville's map of the Malouines or Falkland Isles, is a mere inaccurate outline; we refer our readers to the more exact plans of these islands, published in England. F

Of the harbours.

The harbours, which we have examined, are both extensive and secure; a tough ground, and islands happily situated to break the fury of the waves, contribute to make them safe and easily defensible; they have little creeks, in which the smallest vessels can retire. The rivulets come down into the sea; so that nothing can be more easy, than to take in the provision of fresh water.

Tides.

The tides are subject to all the emotions of the sea, which surrounds the isles, and have never risen at settled periods, which could have been calculated. It has only been observed, that, just before high-water, they have three determinate variations; the sea, at that time, in less than a quarter of an hour, rises and falls thrice; as if shaken up and down; and this motion is more violent during the solstices, the equinoxes, and the full moons.

Winds.

The winds are generally variable; but still those between north and west, and between south and west, are more prevalent than the others. In winter, when the winds are between north and west, the weather is foggy and rainy; if between west and south, they bring snow, hail, and hoar frost; if from between south and east, they are less attended with mists, but violent, though not quite so much, the summer winds, which blow between south-west and north-west: these latter, which clear the sky and dry the soil, do not begin to blow till the sun appears above the horizon; they encrease as that luminary rises; are at the greatest height when he crosses the meridian; and lose their force when he goes to disappear behind the mountains. Besides being regulated by the sun's motion, they are likewise subject to be governed by the tides, which encrease their force, and sometimes alter their direction. Almost all the nights throughout the year are calm, fair, and star-light, especially in summer. The snow, which is brought by the south-west winds in winter, is inconsiderable; it lies about two months upon the tops of the highest mountains; and a day or two, at most, upon the surface of the other grounds. The rivers do not freeze, and the ice of lakes and pools has not been able to bear men upward: of twenty-four hours together. The hoar-frosts in spring and autumn do no damage to the plants, and at sun-rising are converted into dew. In summer, thunder is seldom heard, and, upon the whole, we felt neither great cold, nor great heat; and the distinction of seasons appeared almost insensible. In such a climate, where the revolutions of the seasons affect by no means the constitution, it is natural that men should be strong and healthy; and this has been experienced during a stay of three years.

Water.

The few mineral substances found at the Malouines, are a proof of the goodness of the water, which is everywhere conveniently situated; no noxious plants infect the places where it runs through; its bed is generally gravel or sand, and sometimes turf, which give it a little yellowish hue, without diminishing its goodness and lightness.

Soil.

All the plains have much more depth of soil than is necessary for the plough to go in. The soil is so much interwoven with roots of plants, to the depth of near twelve inches, that it was necessary, before it was possible to proceed to cultivation, to take off this crust or layer; and to

cut it, that it might be dried and burnt. It is known, that this process is excellent to make the ground better, and we made use of it. Below this first layer, is a black mould, never less than eight or ten inches deep, and frequently much deeper; the next is the yellow, or original virgin-soil, whose depth is undeterminate. It rests upon strata of slate and stones; among which no calcareous ones have ever been found; as the trial has been made with aquafortis. It seems, that the isles are without stones of this kind. Journeys have been undertaken to the very tops of the mountains, in order to find some; but they have never procured any other than a kind of quartz, and a sandstone, not friable; which produced sparks, and even a kind of phosphorescent light, accompanied with a smell of brimstone. Stones proper for building are not wanting; for most of the coasts are formed of them. There are strata of a very hard and small grained stone; and likewise other strata, more or less sloping, which consist of slates, and of a kind of stone containing particles of talc. There are likewise stones, which divide into shivers; and on them we observed impressions of a kind of fossil shells, unknown in these seas; we made grind-stones of it to sharpen our tools. The stone taken out of the quarries was yellowish, and not yet come to a sufficient degree of hardness, as it could be cut with a knife; but it hardened in the air. Clay, sand, and earth, fit for making potters-ware and bricks, were easily found.

Turf and its qualities.

The turf, which is generally to be met with above the clay, goes up a great way in the country. From whatever point one sets out, one could not go a league without meeting with considerable strata of it, always easy to be distinguished by the inequalities in the ground, by which some of its sides were discovered. It continually is formed from the remains of roots and plants in marshy places; which are always known by a sharp-pointed kind of rushes. This turf being taken in a bay, near our habitation, where it shews a surface of twelve feet high to the open air, gets a sufficient degree of dryness there. This was what we made use of its smell was not disagreeable; it burnt well, and its cinders, or embers, were superior to those of sea-coals; because, by blowing them, it was as easy to light a candle as with burning coals, it was sufficient for all the works of the forge, excepting the joining of great pieces.

Plants.

All the sea-shores, and the inner parts of the isles are covered with a kind of gladiolus, or rather a species of gramen. It is of an excellent green, and is above six feet high, and serves for a retreat to seals and sea lions: on our journies it sheltered us, as it did them. By its assistance we could take up our quarters in a moment. Its bent and united stalks, formed a thatch or roof, and its dry leaves a pretty good bed. It was likewise with this plant that we covered our houses; its stalk is sweet, nourishing, and preferred to all other food by the cattle.

Next to this great plant, the heath, the shrubs, and the gum plant were the only objects that appeared in the fields. The other parts are covered by small plants, which, in moist ground, are more green and more substantial. The shrubs were of great use to us as fuel, and they were afterwards kept for heating the ovens, together with the heath; the red fruit of the latter attracted a great quantity of game in the season.

Resinous gum-plant.

The gum-plant, which is new and unknown in Europe, deserves a more ample description. It is of a bright green, and has nothing of the figure of a plant; one would sooner take it to be an excrescence of the earth of this colour; for it has neither stalk, branches, nor leaves—Its surface, which is convex, is of so close a texture, that nothing can be introduced between it,

without tearing it. The first thing we did, was to sit down or stand upon it; it is not above a foot and half high. It would bear us up as safely as a stone, without yielding under our weight. Its breadth is very disproportionate to its height; and I have seen some of more than six feet in diameter, without being any higher than common. Its circumference is regular only in the smaller plants, which are generally hemispherical; but when they are grown up, they are terminated by humps and cavities, without any regularity. In several parts of its surface, are drops of the size of pease, of a tough yellowish matter; which was at first called gum; but as it could not be dissolved, except by spirituous solvents, it was named a rosin. Its smell is strong, aromatic, and like that of turpentine. In order to know the inside of this plant, we cut it close to the ground, and turned it down. As we broke it, we saw that it comes from a stalk, whence an infinite number of concentric shoots arise, consisting of leaves like stars, enchased one within the other, by means of an axis common to all.

These shoots are white within, except at a little distance of the surface, where the air colours them green. When they are broken, a milky juice comes out in great abundance; which is more viscid than that of spurge. [1] The stalk abounds with the juice, as do the roots, which extend horizontally and often at some distance send forth new shoots, so that you never find one of these plants alone. It seems to like the sides of hills; and it thrives well in any exposure. It was not before the third year that we endeavoured to know its flower and seeds, both of which are very small, because we had been disappointed in our attempts to bring it over to Europe. At last, however, some seeds were brought, in order to endeavour to get possession of so singular and new a plant, which might even prove useful in physic as its rosin had already been successfully applied to slight wounds by several sailors. One thing deserves to be observed, namely, that this plant loses its rosin by the air alone, and the washing of the rains. How can we make this agree with its quality of dissolving in spirits alone? In this state it was amazingly light, and would burn like straw.

Beer-plant.

After this extraordinary plant, we met with one of approved utility; it forms a little shrub, and some times creeps under the plants, and along the coast. We accidentally tasted it, and found it had a spruce taste, which put us in mind of trying to make beer of it; we had brought a quantity of melasses and malt with us; the trials we made, answered beyond expectation; and the settlers being once instructed in the process, never were in want of this liquor afterwards, which was antiscorbutic, by the nature of the plant; it was with good success employed in baths, which were made for sick persons, who came from the sea. Its leaves are small and dentated, and of a bright green. When it is crushed between the fingers, it is reduced into a kind of meal, which is somewhat glutinous, and has an aromatic smell.

A kind of celery or wild parsley, in great quantities; abundance of sorrel, water cresses, and a kind of maiden-hair, [2] with undated leaves, furnished as much as could be required against the scurvy, together with the above plant.

1 Euphorbia Linn. Tithymalus Tournef. F.

2 Ceterac Asplenium, Linn. F.

Fruits.

Two small fruits, one of which is unknown, and looks like a mulberry, the other no bigger than a pea, and called lucet, on account of the similarity it bears to that which is found in North-America, were the only ones which were to be had in autumn. Those which grew upon the bushes were good for nothing, excepting for children, who will eat the worst of fruits, and for wild-fowl. The plant on which the fruit, which we called mulberry, grew, is creeping; its leaf resembles that of the hornbeam; its branches are long, and it is propagated like the strawberry.

The lucet is likewise a creeping plant, bearing the fruit all along its branches, which are beset with little shining round leaves, of the colour of myrtle leaves; their fruits are white, and coloured red on that side which is turned towards the sun; they have an aromatic taste, and smell like orange-blossoms, as do the leaves, of which the infusion drank with milk is very pleasant to the taster. This plant is hidden among the grass, and prefers a wet soil: a prodigious quantity of it grows in the neighbourhood of lakes.

Flowers.

Among several other plants, which we found superfluous to examine, there were many flowers, but all without smell, one excepted, which is white, and has the smell of the tuberose. We likewise found a true violet, as yellow as a jonquil. It is worth notice that we have never found any bulbous-rooted plant. Another singularity is, that in the southern part of the isle we inhabited, beyond a chain of hills which divides it from east to west, it appeared that there were hardly any of the resinous gum-plants, and that in their stead we found abundance of another plant of the same form, but of a different green, wanting the solidity of the other, and not producing any rosin, but only fine yellow flowers in the proper season. This plant, which was easily opened, consisted as the other, of shoots which all spring from the same stalk, and terminate at its surface. Coming back over the hills, we found a tall species of maiden hair; its leaves are not waved, out in the form of sword blades. From the plant arise two principal stalks, which bear their seeds on the underside, like the other species of maiden hair. There were likewise a great quantity of friable plants growing upon stones, they seemed to partake of the nature of stone, and of vegetables; they were thought to be species of lichen, but the ascertaining whether they would be of use in dying, was put off to another time.

Sea plants.

As to the submarine plants, they were more inconvenient than of any use. The whole harbour is covered with sea weeds, especially near the shore, by which means the boats found it difficult to land; they are of no other service than to break the force of the waters when the sea runs very high. We hoped to make a good use of them by employing them for a manure. The tides brought us several species of coralines, which were very much varied, and of the finest colours; these, together with the sponges and shells, have deserved places in the cabinets of the curious. All the sponges have the figure of plants, and are branched in so many different ways, that we could hardly believe them to be the work of marine insects. Their texture is so compact, and their fibres so delicate, that it is inconceivable how these animals can lodge in them. The coasts of the Malouines have provided the collections in Europe with several new shells; the most curious of which, is that called *la poulette*. There are three sorts of this bivalve; and among them the striated one had never before been seen, except in the fossil state; this may prove the assertion, that the fossil-shells, found much below the level of the sea, are not *lusus naturæ*, and accidentally formed; but that they have really been inhabited by living animals, at the time

when the land was covered by the water. Along with this shell, which is very common here, there are limpets; [1] esteemed on account of their fine colours; whelks [2] of several kinds; scallops; [3] great striated and smooth muscle-shells, [4] and the finest mother of pearl.

Animals.

There is only a single species of quadruped upon these islands; it is a medium between the wolf and the fox. The land and water-fowls are innumerable. The sea-lions and seals are the only amphibia. All the coasts abound with fish, most of them little known. The whales keep in the open sea; some of them happen now and then to be stranded in the bays, and their remains are sometimes seen there. Some other bones of an enormous size, a good way up in the country, whither the force of the waves could never carry them, prove that either the sea is diminished, or that the soil is increased.

The wolf-fox, (*loup-renard*) thus called, on account of its digging a kennel under ground, and having a more bushy tail than a wolf, lives upon the downs along the seashore. It attacks the wild fowls; and makes its roads from one bay to another, with so much sagacity, that they are always the shortest that can be devised; and, at our first landing on the isle, we had almost no doubt of their being the paths of inhabitants. It seems this animal fasts during a time of the year; for it is then vastly lean. Its size and make is that of a common shepherd's dog; and it barks in the same manner, though not so loud. In what manner can it have been transported to these islands? [5]

The birds and fish have enemies, which endanger their tranquility. These enemies of the birds are the above kind of wolf, which destroys many of their eggs and young ones; the eagles, hawks, falcons, and owls.

The fish are still worst used; without mentioning the whales, which feeding, as is well known, upon fry only, destroy prodigious numbers; they are likewise exposed to the amphibious creatures, and to birds; some of which are always watching on the rocks, whilst others constantly skim along the surface of the sea.

It would require a great deal of time, and the eyes of an able naturalist, in order, to describe the following animals well. I shall here give the most essential observations, and extend them only to such animals as were of some utility.

Web-footed birds.

Among the web-footed birds, the swan is the first in order; it only differs from the European one by its neck; which is of a velvet black, and makes an admirable contrast with the whiteness of the rest of its body; its feet are flesh-coloured. This kind of swan is like-wise to be found in Rio de la Plata, and in the straits of Magalhaens.

1 Lepas Linn. 2 Buccinum Linn, 3 Ostreæ Pectines Linn. 4 Mya Linn. F.

5 For a navigator, of Mr. Bougainville's experience and abilities, this query is very extraordinary; and, still more so, for a man who has spent so many years in Canada, near the coasts of Labrador; and who certainly must have read accounts from Greenland, where often land-animals, on large masses of ice fixed to the shore, and broke loose by the sea, are driven into the ocean; and again landed on-the shores of countries, very distant from their native home. F.

Four species of wild-geese made part of our greatest riches. The first only feeds on dry land; and has, improperly, been called bustard. [1] Its high legs serve to elevate it above the tall grass, and its long neck to observe any danger. It walks and flies with great ease; and has not that disagreeable cackling cry, peculiar to the rest of its kind. The plumage of the male is white, mixed with black and ash-colour on the wings. The female is yellow; and its wings are adorned with changing colours it generally lays six eggs. Its flesh is wholesome, nourishing, and palatable; it seldom happened that we had any scarcity of this kind of geese; for, besides these which are bred in the isle, they come in great flocks in autumn, with the east wind, probably from some uninhabited country. The sportsmen easily distinguish these new-comers, by the little fear they shew of men. The other three species are not so much in request; for they feed on fish, and get a trainy taste. Their figure is not so elegant as that of the first species; one of these kinds seldom rises above the water, and is very noisy. The colours of their feathers are chiefly white, black, yellow, and ash-colour. All these species, and likewise the swan, have a soft down under the feathers; which is white or grey, and very thick,

Two kinds of ducks, and two of teals, frequent the ponds and rivers. The former are but little different from those of our climate; some of those which we killed, were quite black, and others quite white. As to the teals, the one has a blue bill, and is of the size of the ducks; the other is much less. Some of them had the feathers on the belly of a flesh colour. These species are in great plenty, and of an excellent taste.

Here are two kinds of Divers, of a small size. One of them has a grey back, and white belly; the feathers on the belly are so silky, shining, and close, that we imagined these were the birds, of whose plumage the fine muffs are made: this species is here scarce. [2] The other, which is more common, is quite brown, but somewhat paler on the belly than on the back. The eyes of these creatures are like rubies. Their surprising liveliness is heightened and set off still more by the circle of white feathers that surrounds them; and has caused the name of Diver with Spectacles to be given to the bird. They breed two young ones at a time, which are probably too tender to suffer the coldness of the water, whilst they have nothing but their down; for then the mother conveys them on her back. [3] These two species have not webbed feet, as the other water-fowl; but their toes are separate, with a strong membrane on each side; in this manner, each toe resembles a leaf, which is roundish towards the claw; and the lines, which run from the toe to the circumference of the membrane, together with its green-colour and thinness, increase the resemblance.

1 In the northern parts of America is a kind of wild goose which was called by the French, when in possession of Canada, Outarde, or Bustard; the English call it the Canada-goose; it has been represented by Catesby, l.t. 92. Edward t. 151. and the Planches Enluminees, t. 346. Perhaps this may be the same species. F.

2 This bird, though the author calls it a Diver, seems, according to the description of it, to be rather the Grebe; which is so plentiful on the lake of Geneva, whose beautiful skins are drest, and made into muffs and tippetts. Br. Zool. 2. p. 396. 8vo. Ed. F.

3 This species seems to be the white and dusky grebe. Br. Zool. 2. p. 397. an 1 vol. 4. F. 17. F

Two species of birds, which were called by our people saw-bills, [1] I know not for what reason, only differed from each other in size, and sometimes because there were now and then some with brown bellies; whereas, the general colour of that part, in other birds of the kind, was white. The rest of the feathers are of a very dark blueish-black; in consequence of their shape, and the close texture and silkiness of their vent feathers, we must rank them with the divers, though I cannot be positive in this respect. They have a pointed bill, and the feet webbed without any reparation between the toes; the first toe, being the longest of the three, and the membrane which joins them, ending in nothing at the third toe, gives a very remarkable character. Their feet are flesh-coloured. [2] These birds destroy numbers of fish; they place themselves upon the rocks, join together by numerous families, and lay their eggs there. As their flesh is very good to eat, we killed two or three hundred of them at a time; and the abundance of their eggs offered another resource to supply our wants. They were so little afraid of our sportsmen, that it was sufficient to go against them with no better arms than sticks. Their enemy is a bird of prey, with webbed feet; measuring near seven feet from tip to tip, and having a long and strong bill, distinguished by two tubes of the same substance as the bill itself, which are hollow throughout. This is the bird which the Spaniards call *Quebrantabuessos*. [3] A great quantity of mews, variously and prettily marked, of gulls and of terns, almost all of them grey, and living in families, come skimming along the water, and fall upon the fish with extraordinary quickness; they were so far of use to us, that they shewed us the proper season of catching pilchards; they held them suspended in the air for a moment only, and then presently gave back entire, the fish they had swallowed just before. At other seasons they feed upon a little fish, called *gradeau*, and some other small fry. They lay their eggs in great quantities round the marshes, on some green plants, pretty like the water lily [4] and they were very wholesome food.

1 Becs-scies.

2 As far as we can guess, from this very imperfect description, the birds here mentioned seem to be of the kind called Guillemot. Br. Zool. vol. 2. p. 410. and vol. 4. t. 20. F.

3 The *Quebrantabuessos* is a bird belonging to the genus called by Dr. Linnæus, *Procellaria*, or petrel; some of the sailors call it Albatross, but then we must take care not to confound the common albatross, represented by Mr. Edwards, tab. 88, which is not this *Quebrantabuessos*, but I believe the bird described by our author to be not yet well known by our ornithologists and the imperfect account of Bougainville and Dom Pernetty are far from being satisfactory to natural historians. Our late great circumnavigators and philosophers will probably oblige the literary world with a drawing and account of this bird. F

4 Nenuphars, Nymphaeæ Linn, F.

We found three species of penguins: the first of them is remarkable on account of its shape, and the beauty of its plumage, and does not live in families as the second species, which is the same with that described in Lord Anson's Voyage. [1] The penguin of the first class is fond of solitude and retired places. It has a peculiar noble and magnificent appearance, having an easy gait, a long neck when singing or crying, a longer and more elegant bill than the second sort, the back of a more blueish cast, the belly of a dazzling white, and a kind of palatine or necklace of a bright yellow, which comes down on both sides of the head, as a boundary between the blue and the white, and joins on the belly. [2] We hoped to be able to bring one of them over to Europe. It was easily tamed so far as to follow and know the person that had the care of feeding it; flesh, fish, and bread, were its food; but we perceived that this food was not sufficient, and that it absorbed the fatness of the bird; accordingly, when the bird was grown lean to a certain degree, it died. The third sort of penguins live in great flocks or families like the second; they inhabit the high cliffs, where we found the saw-bills (*becs-scies*), and they lay their eggs there. Their distinguishing characters are, the smallness of their size, their dark yellow colour, a tuft of gold-yellow feathers, which are shorter than those of the Egret, [3] and which they raise when provoked, and lastly, some other feathers of the same colour, which stand in the place of eye-brows; our people called them hopping penguins, because they chiefly advance by hopping and skipping. This species carries greater air of liveliness in its countenance than the two others. [4]

Three species of petrels, (alcyons) which appear but seldom, did not forebode any tempests, as those do which are seen at sea. They are however the same birds, as our sailors affirmed, and the least species has all the characters of it. Though this may be the true alcyons, [5] yet so much is certain, that they build their nests on shore, whence we have had their young ones covered only with down, but perfectly like their parents in other respects. The second sort only differs from them in size, being somewhat less than a pigeon. These two species are black, with some white feathers on the belly. [6]

1 The place referred to here in Lord Anson's Voyage is book I. chap. vii. p 92. edit. 14th, in 8vo. 1769; but from thence, as well as from our author's account, it is impossible to determine which species of the penguin is meant. F.

2 The first of these penguins seems to be that described by Mr. Pennant in the *Philof. Tranf.* vol. lix. and represented in an accurate drawing. F.

3 *Aigrette*, a species of heron.

4 This last species of penguin, or auk, seems to be the same with the *alca cirrhata* of Dr. Pallas, *Spiceleg. Zool. Fasc. v. p. 7. tab. i. & v. fig. 1—3.* F.

5 The author certainly has the noted sable of the antients in view, according to which, the alcyons had a swimming nest, and brooded at sea at a time in winter, when the weather was calm. The few calm days during which these birds were employed in brooding, were therefore called *alcyonia*. F.

6 The two petrels here mentioned seem to be the little, and the sea-swallow or frigate; the first of which is described, *Br. Zool. vol. ii. p. 434*, and represented, *vol. iv. t. 82*. The second, or swallow-petrel, or frigate, is to be met with in *Rochefort's Voyage, t. 135*. Dr. Linnæus calls the first *procellaria pelagica*, the latter the *fregatta*, and, if I am not mistaken, the third kind here mentioned, is, the fulmar, *Br. Zool. vol. ii. p. 431. and vol. iv. t. 82*. Dr. Linnæus's *Procellaria glacialis*. F.

The third sort was at first called white-pigeon, on account of its feathers being all of that colour, and its bill being red: there is reason to suppose it is a true white alcyon, on account of its conformity with the other species.

Birds with cloven feet.

Three sorts of eagles, of which the strongest have a dirty white, and the others a black plumage, with yellow and white feet, attack the snipes and little birds; neither their size nor the strength of their claws allowing them to fall upon others, A number of sparrow hawks and falcons, together with some owls, are the other enemies of the fowl. Their plumage is rich, and much varied in colour.

The snipes are the same as the European ones; they do not fly irregularly when they rise, and are easy to be shot. In the breeding season they soar to a prodigious height; and after singing and discovering their nest, which they form without precaution in the midst of the fields, on spots where hardly any plants grow, they fall down upon it from the height they had risen to before; at this season they are poor; the best time for eating them is in autumn.

In summer we saw many curlews, which were not at all different from ours.

Throughout the whole year we saw a bird pretty like a curlew on the sea-side; it was called a sea-pie. [1] on account of its black and white plumage; its other characteristics are, a bill of the colour of red coral, and white feet, it hardly ever leaves the rocks, which are dry at low water, and lives upon little shrimps. It makes a whittling noise, easy to be imitated, which proved useful to our sportsmen, and pernicious to the bird.

Egrets are pretty common here; at first we took them for common herons, not knowing the value of their plumes. These birds begin to feed towards night; they have a harsh barking noise, which we often took for the noise of the wolf we have mentioned before.

Two sorts of stares or thrushes came to us every autumn; a third species remained here constantly, it was called the red bird; [2] its belly is quite covered with feathers of a beautiful fiery red, especially during winter; they might be collected, and would make very rich tippets. One of the two remaining species is yellow, with black spots on the belly, the other has the colour of our common thrushes. I shall not give any particular account of an infinite number of little birds, that are pretty like those seen in the maritime provinces of France.

The sea-lions and seals are already known; these animals occupy the sea-shore, and lodge, as I have before mentioned, among the tall plants, called gladioli; [3]

1 The sea-pie is sometimes called oyster-catcher, because this bird forces the shells open with its bill, which are left bare on the shore, at the recession of the tide. Br. Zool. vol. iv. p. 376, Dr. Linnæus *Hæmatopus Ostralegus*. F.

2 This seems to be the American red-breast, or *turdus migratorius*, Linn, and Kalm's Voyage, vol. ii. p. 90, where likewise a figure of it is given. F.

3 Glayeuls.

They go up a league into the country in innumerable herds, in order to enjoy the fresh herbs, and to bask in the sun. It seems the sea-lion described in Lord Anson's Voyage ought, on account of its snout, to be looked upon as a kind of marine elephant, especially as he has no mane; is of an amazing size, being sometimes twenty-two feet long, and as there is another species much inferior in size, without any snout, and having a mane of longer hairs than those on the rest of the body, which therefore should be considered as the true sea-lion. [1]

The seal (*loup marin*) has neither mane nor snout; thus all the three species are easily distinguished. Under, the hair of all these creatures, there is no such down as is found in those caught in North America and Rio de la Plata. Their grease or train oil, and their skins, might form a branch of commerce.

We have not found a great variety of species of fish. That sort which we caught most frequently, we called mullet, [2] to which it bears some resemblance. Some of them were three feet long, and our people dried them. The fish called *gradeau* is very common, and sometimes found above a foot long. The sardine only comes in the beginning of winter. The mullets being pursued by the seals, dig holes in the slimy ground, on the banks of the rivulets, where they take shelter, and we took them without difficulty, by taking off the layer of mud that covered their retreats. Besides these species, a number of other very small ones were taken with a hook and line, and among them was one which was called a transparent pike. [3] Its head is shaped like that of our pike, the body without scales, and perfectly diaphanous. There are likewise some congers on the rocks, and the white porpesse, called *la taupe*, or the mole, appears in the bays during the fine season. If we had had time, and men enough to spare, for the fishery at sea, we should have found many other fish, and certainly some soals, of which a few have been found, thrown upon the sands. Only a single sort of fresh water fish, without scales, has been taken; it is of a green colour, and of the size of a common trout. [4]

It is true, we have made but few researches in this particular, we had but little time; and other fish in abundance.

Crustaceous fish.

Here have been found only three small sorts of crustacea; viz. the cray-fish, which is red, even before it is boiled, and is properly a prawn; the crab with blue feet, resembling pretty much that called *tourelourou*, and a minute species of shrimp. These three crustacea, and all muscles, and other shell fish, were only picked up for curiosity's sake, for they have not so good a taste as those in France.----This land seems to be entirely deprived of oysters.

Lastly, by way of forming a companion with some cultivated isle in Europe, I shall quote what Puffendorf says of Ireland, which is situated nearly in the same latitude in the northern hemisphere, as the Malouines in the southern one, viz. "that this island is pleasant" on account of the healthiness and serenity of the air, "and because heat and cold are never excessive there. "The land being well divided by lakes and rivers, offers "great plains, covered with excellent pasture, has no "venomous creatures, its lakes and rivers abound with | fish, &c." See the Universal History.

1 The animal here mentioned as the true sea-lion exceeds the sea-lion described in Lord Anson's Voyage; for this is twenty-five feet long, and that in the isle of Juan Fernandes only twenty; See Voyage aux Isles Malouines, par Dom Pernetty. F.

2 *Muge ou mullet.*

3 *Brochet transparent.*

4 This kind of trout has been likewise mentioned in a pamphlet published last winter about the Falkland isles. F.

CHAP V

Navigation from the Malouines to Rio-Janeiro; junction of the Boudeuse with the Etoile.—Hostilities of the Portuguese against the Spaniards. Revenues of the king of Portugal from Rio-Janeiro.

1767. June. Departure from the Malouines for Rio-Janeiro.

I WAITED, in vain, for the Etoile, at the Malouines; the months of March and April had passed, and that store-ship did not arrive. I could not attempt to traverse the Pacific Ocean with my frigate alone; as she had no more room than what would hold six months provision for the crew. I still waited for the store-ship, during May. Then seeing that I had only two months provisions, I left the Malouines the second of June, in order to go to Rio-Janeiro; which I had pointed out as a rendezvous to M. de la Giraudais, commander of the Etoile, in case some circumstances should prevent his coming to join me at the Malouines.

During this navigation, we had very fair weather. The 20th of June, in the afternoon, we saw the high head-lands of the Brasils; and, on the 21st, we discovered the entrance of Rio-Janeiro. Along the coast we saw several fishing boats. I ordered Portuguese colours to be hoisted, and fired a cannon: upon this signal one of the boats came on board, and I took a pilot to bring us into the road. He made us run along the coast, within half a league of the isles which lie along it. We found many shoals every where. The coast is high, hilly, and woody; it is divided into little detached and perpendicular hillocks, which vary their prospect. At half an hour past five, in the afternoon, we were got within the fort of Santa-Cruz; from whence we were hailed; and at the same time a Portuguese officer came on board, to ask the reason of our entering into port. I sent the chevalier Bournand with him, to inform the count d'Acunha, viceroy of the Brasils, of it, and to treat about the salute. At half an hour past seven, we anchored in the road, in eight fathoms water, and black muddy bottom.

Discussion concerning the salute.

The chevalier de Bournand returned soon after 5 and told me, that, concerning the salute, the count d'Acunha had answered him, that if a person, meeting another in a street, took off his hat to him, he did not before inform himself whether or no this civility would be returned; that if we saluted the place, he would consider what he should do. As this answer was not a sufficient one, I did not salute. I heard at the same time, by means of a canoe, which M. de la Giraudais sent to me, that he was in this port; that his departure from Rochefort, which should have been

Junction with the Etoile.

in December, had been retarded till the beginning of February; that after three months sailing, the water which his ship made, and the bad condition of her rigging, had forced him to put in at Montevideo, where he had received information concerning my voyage, by means of the Spanish frigates returning from the Malouines; and he had immediately set sail for Rio-Janeiro, where he had been at anchor for six days.

This junction enabled me to continue my expedition; though the Etoile, bringing me upwards of fifteen months salt provisions and liquor, had hardly for fifty days bread and legumes to give

me. The want of these indispensable provisions, obliging me to return and get some in Rio de la Plata; as we found at Rio-Janeiro, neither biscuit, nor wheat, nor flour.

Difficulties raised by the Portuguese against a Spanish ship.

There were, at this time, two vessels in this port which interested us; the one a French, and the other a Spanish one. The former, called l'Etoile du Matin, or the Morning Star, was the king's ship bound for India; which, on account of its smallness, could not undertake to double the Cape of Good Hope during winter; and, therefore, came hither to wait the return of the fair season. The Spanish vessel was a man of war, of seventy-four guns, named the Diligent, commanded by Don Francisco de Medina. Having sailed from the river of Plata, with a cargo of skins and piastres; a leak which his ship had sprung, much below her water-line, had obliged him to bring her hither, in order to refit her for the voyage to Europe.

Assistance which we gave her.

He had been here eight months; and the refusal of necessary assistance, and the difficulties which the viceroy laid in his way, had prevented his finishing the repair: accordingly, Don Francisco sent the same evening that I arrived, to beg for my carpenters and caulkers; and the next morning I sent them to him from both the vessels.

The viceroy visits us on board the frigate.

The 22nd we went in a body to pay a visit to the viceroy; he came and returned it on the 25th; and, when he left us, I saluted him with nineteen guns, which were returned from the shore. On this visit, he offered us all the assistance in his power; and even granted me the leave I asked, of buying a sloop, which would have been very useful, during the course of my expedition; and, he added, that if there had been one belonging to the king of Portugal, he would have offered it me. He likewise assured me, that he would make the most exact enquiries, in order to discover those, who, under the very windows of his palace, had murdered the chaplain of the Etoile, a few days before our arrival; and that he would proceed with them according to the utmost severity of the law. He promised justice; but the law of nations was very ineffectually executed at this place.

However, the viceroy's civilities towards us continued for several days: he even told us his intention of giving us a *petit super*, or collation, by the water-side, in bowers of jasmine and orange-trees; and he ordered a box to be prepared for us at the opera. We saw, in a tolerable handsome hall, the best works of Metastasio represented by a band of mulattoes; and heard the divine composition of the great Italian masters, executed by an orchestra, which was under the direction of a humpbacked priest, in his canonicals.

The favour which we enjoyed, occasioned great matter of astonishment to the Spaniards, and even to the people of the country; who told us, that their governor's proceedings would not be the same for a long time. Indeed, whether the assistance we gave the Spaniards, and our own connections with them displeased him, or whether he could no longer feign a conduct, so diametrically opposite to his natural temper, he soon became, in regard to us, what he had been to every body else.

Hostilities of the Portuguese against the Spaniards.

The 28th of June, we heard that the Portuguese had surprised and attacked the Spaniards at Rio-Grande; that they had driven them from a station which they occupied on the left shore of

that river; and that a Spanish ship, touching at the isle of St. Catherine, had been detained there. They fitted out here, with great expedition, the San Sebastiano, of sixty-four guns, built here; and a frigate, mounting forty guns, called Nossa Senhora da Gracia. This last was destined, it was said, to escort a convoy of troops and ammunition to Rio-Grande, and to the colony of Santo Sacramento. These hostilities and preparations gave us reason to apprehend that the viceroy intended to stop the Diligent; which was careening upon the isle das Cobras, and we

1767. July.

accelerated her refitment as much as possible. She really was ready on the last day of June, and began to take in the skins, which were part of her lading; but on the sixth of July, when she wanted to take back her cannon, which, during the repair, had been deposited, on the isle das Cobras, the viceroy forbade their being delivered; and declared, that he arrested the ship, till he had received the orders of his court, on the subject of the hostilities committed at Rio-Grande. In vain did Don Medina take all the necessary steps on this occasion; count d'Acunha would not so much as receive the letter, which the Spanish commander sent him by an officer, from on board his ship.

Bad proceedings of the viceroy towards us.

We partook of the disgrace of our allies. Having, upon the repeated leave of the viceroy, concluded the bargain for buying a snow, his excellency forbade the seller to deliver it to me. He likewise gave orders, that we should not be allowed the necessary timber out of the royal dock-yards, for which we had already agreed: he then refused me the permission of lodging with my officers, (during the time that the frigate underwent some essential repairs) in a house near the town, offered me by its proprietor: and which commodore Byron had occupied in 1765, when he touched at this port. On this account, and likewise upon his refusing me the snow and the timber, I wanted to make some remonstrances to him. He did not give me time to do it; and, at the first words I uttered, he rose in a furious passion, and ordered me to go out; and being certainly piqued, that, in spite of his anger, I remained sitting with two officers, who accompanied me, he called his guards; but they, wiser than himself, did not come, and we retired; so that nobody seemed to have been disturbed. We were hardly gone, when the guards of his palace were doubled, and orders given to arrest all the French that should be found in the streets after sun-setting. He likewise sent word to the captain of the French ship of four guns, to go and anchor under the fort of Villagahon; and the next morning I got her towed there by my boats.

They determine us to leave Rio-Janeiro.

From hence forward, I was intent upon my departure; especially as the inhabitants, with whom we had any intercourse of trade, must fear every thing from the viceroy. Two Portuguese officers became the victims of the civility they shewed us; the one was imprisoned in the citadel; the other exiled to Santa, a small town between St. Catherine and Rio-Grande. I made haste to take in our water, to get the most necessary provisions out of the Etoile, and to embark refreshments. I had been forced to enlarge our tops; and the Spanish captain furnished me with the necessary timber for that purpose, which had been refused us out of the docks. I likewise got some planks, which we could not do without; and which were sold to us secretly. At last, on the 12th, every thing being ready, I sent an officer to let the viceroy know, I should weigh with the first fair wind. I advised M. d'Etcheveri, who commanded l'Etoile du Matin, (the Morning-Star) to stop at Rio-Janeiro as little as he could; and rather to employ the time that

remained, till the favourable season for doubling the Cape of Good Hope came on, in going to survey the isles of Tristan d'Acunha, where he would find wood, water, and abundance of fish; and I gave him some memoirs I had concerning these isles. I have since heard, that he has followed my advice.

During our stay at Rio-Janeiro, we enjoyed one of the springs, which are obvious in poetical descriptions; and the inhabitants testified, in the most genteel manner, the displeasure which their viceroy's bad proceedings against us, gave them. We were sorry, that it was not in our power to stay any longer with them. The Brasils, and the capital in it, have been described by so many authors, that I could mention nothing, without tediously repeating what has been said before. Rio Janeiro has once been conquered by France; and is, of course, well known there. I will confine myself to give an account of the riches, of which that city is the staple; [1] and of the revenues which the king of Portugal gets from thence. I must previously mention, that M. de Commerçon, an able naturalist, who came with us on board the *Etoile*, in order to go on the expedition, assured me, that this was the richest country in plants he had ever met with; and that it had supplied him with whole treasures in botany.

Account of the riches of Rio-Janeiro.

Rio-Janeiro is the emporium and principal staple of the rich produce of the Brasils. The mines, which are called *general*, are the nearest to the city being about seventy-five leagues distant. They annually bring in to the king, for his fifth part, at least one hundred and twelve arobas of gold; in 1762 they brought in a hundred and nineteen. Under the government of the general mines, are comprehended those of Rio das Mortes, of Sahara, and of Sero-frio. The last place, besides gold, produces all the diamonds that come from the Brasils. They are in the bed of a river; which is led aside, in order afterwards to separate the diamonds, topazes, chrysolites, and other stones of inferior goodness, from the pebbles, among which they ly.

Regulations for examining the mines.

Mines of Diamonds.

All these stones, diamonds excepted, are not contraband: they belong to the possessors of the mines; but they are obliged to give a very exact account of the diamonds they find; and to put them into the hands of a surveyor, [2] whom the king appoints for this purpose.

The surveyor immediately deposits them in a little casket, covered with plates of iron, and locked up by three locks. He has one of the keys, the viceroy the other, and the *Provador de Hazienda Reale* the third. This casket is inclosed in another, on which are the seals of the three persons above mentioned, and which contains the three keys to the first. The viceroy is not allowed to visit its contents; he only places the whole in a third coffer, which he sends to Lisbon, after putting his seal on it. It is opened in the king's presence; he chooses the diamonds which he likes out of it, and pays their price to the possessors of the mines, according to a tariff settled in their charter.

The possessors of the mines pay the value of a Spanish piastre or dollar per day to his Most Faithful Majesty, for every slave sent out to seek diamonds; the number of these slaves amounts to eight hundred. Of all the contraband trades, that of diamonds is most severely punished.

1 Debouché.

2 Intendant.

If the smuggler is poor, he loses his life; if his riches are sufficient to satisfy what the law exacts, besides the confiscation of the diamonds, he is condemned to pay double their value, to be imprisoned for one year, and then exiled for life to the coast of Africa, Notwithstanding this severity, the smuggling trade with diamonds, even of the most beautiful kind, is very extensive; so great is the hope and facility of hiding them, on account of the little room they take up.

Gold mines.

All the gold which is got out of the mines cannot be sent to Rio Janeiro, without being previously brought into the houses, established in each district, where the part belonging to the crown is taken. What belongs to private persons is returned to them in wedges, with their weight, their number, and the king's arms stamped upon them. All this gold is allayed by a person appointed for that purpose, and on each wedge or ingot, the alloy of the gold is marked, that it may afterwards be easy to bring them all to the same alloy for the coinage.

These ingots belonging to private persons are registered in the office of *Praybuna*, thirty leagues from Rio Janeiro. At this place is a captain, a lieutenant, and fifty men: there the tax of one fifth part is paid, and further, a poll-tax of a *real* and a half per head, of men, cattle, and beasts of burden. One half of the produce of this tax goes to the king, and the other is divided among the detachment, according to the rank. As it is impossible to come back from the mines without passing by this station, the soldiers always stop the passengers, and search them with the utmost rigour.

The private people are then obliged to bring all the ingots of gold which fall to their share, to the mint at Rio Janeiro, where they get the value of it in cash this commonly consists of demi-doublers, worth eight Spanish dollars. Upon each demi-doubloon, the king gets a piastre or dollar for the alloy, and for the coinage. The mint at Rio Janeiro is one of the finest buildings existing. It is furnished with all the conveniences necessary towards working with the greatest expedition. As the gold comes from the mines at the same time that the fleets come from Portugal, the coinage must be accelerated, and indeed they coin there with amazing quickness.

The arrival of these fleets, and especially of that from Lisbon, renders the commerce of Rio Janeiro very flourishing. The fleet from Porto is laden only with wines, brandy, vinegar, victuals, and some coarse cloths, manufactured in and about that town. As soon as the fleets arrive, all the goods they bring are conveyed to the custom-house, where they pay a duty of ten per cent to the king. It must be observed that the communication between the colony of Santo Sacramento and Buenos Ayres bring entirely cut off at present, that duty must be considerably lessened; for the greater part of the most precious merchandizes which arrived from Europe were sent from Rio Janeiro to that colony, from whence they were smuggled through Buenos Ayres to Peru and Chili; and this contraband trade was worth a million and a half of piastres or dollars annually to the Portuguese. In short, the mines of the Brasils produce no silver, and all that which the Portuguese got, came from this smuggling trade. The negro trade was another immense object. The loss which the almost entire suppression of this branch of contraband trade occasions, cannot be calculated. This branch alone employed at least thirty coasting vessels between the Brasils and Rio de la Plata.

Revenues of the king of Portugal from Rio Janeiro.

Besides the old duty of ten per cent which is paid at the royal custom-house, there is another duty of two and a half per cent, laid on the goods as a free gift, on account of the unfortunate event which happened at Lisbon in 1755. This duty must be paid down at the custom-house

immediately, whereas for the tenth, you may have a respite of six months, on giving good Security.

The mines of S. Paolo and Parnagua pay the king four arrobas as his fifth, in common years. The most distant mines, which are those of Pracaton and Quiaba, depend upon the government [1] of Matagrosso. The fifth of these mines is not received at Rio Janeiro, but that of the mines of Goyas is. This government has likewise mines of diamonds, but it is forbidden to search in them.

All the expences of the king of Portugal at Rio Janeiro, for the payment of the troops and civil officers, the carrying on of the mines, keeping the public buildings in repair, and refitting of ships, amount to about six hundred thousand piastres. I do not speak of the expence he may be at in constructing ships of the line and frigates, which he has lately begun to do here.

A summary account and the amount of the separate articles of the king's revenue, taken at a medium in Spanish Dollars

	Dollars.
One hundred and fifty arrobas of gold, of which in common years all the fifths amount to	1,125,0 00
The duty on diamonds	240,000
The duty on the coinage	400,000
Ten per cent, of the custom-house	350,000
Two and a half per cent, free gift	87,000
Poll tax, sale of employs, offices, and other produces of the mines	225,000
The duty on negroes	110,000
The duty on train-oil, salt, soap and the tenth on the victuals of the country	130,000
Total in dollars or piasters	2,667,000

From whence, if you deduct the expences above mentioned, it will appear that the king of Portugal's revenues from Rio Janeiro, amount to upwards of ten millions of our money (livres [1]).

1 Upwards of 450,000 pounds sterling; at 4s. and 6d, per dollar.

CHAP. VI

Departure from Rio Janeiro: second voyage to Montevideo; damage which the Etoile receives there,

1767. July. Departure from Rio Janeiro.

THE 14th of July we weighed from Rio Janeiro, but for want of wind we were obliged to come to an anchor again in the road. We sailed on the 15th, and two days after, the frigate being a much better sailer than the Etoile, I was obliged to unrig my top-gallant masts, as our lower masts required a careful management. The winds were variable, but brisk, and the sea very high. In the night between the 19th and 20th, we lost our main-top-sail, which was carried away on its clue-lines.

Eclipse of the sun.

The 25th there was an eclipse of the sun, visible to us. I had on board my ship M. Verron, a young astronomer, who came from France in the Etoile, with a view to try, during the voyage, some methods towards finding the longitude at sea.

According to our estimation of the ship's place, the moment of immersion, as calculated by the astronomer, was to be on the 25th, at four hours nineteen minutes in the evening. At four hours and six minutes, a cloud prevented our seeing the sun, and when we got sight of him again, at four hours thirty-one minutes, about an inch and a half was already eclipsed. Clouds successively passed over the sun's disk, and let us see him only at very short intervals, so that we were not able to observe any of the phases of the eclipse, and consequently could not conclude our longitude from it. The sun set to us before the moment of apparent conjunction, and we reckoned that that of immersion had been at four hours twenty-three minutes.

Entrance into Rio de la Plata.

On the 26th we came into soundings; the 28th in the morning we discovered the Castilles. This part of the coast is pretty high, and is to be seen at ten or twelve leagues distance. We discovered the entrance to a bay, which probably is the harbour where the Spaniards have a fort, and where I have been told there is very bad anchorage. The 29th we entered Rio de la Plata, and saw the Maldonados. We advanced but little this day and the following. Almost the whole night between the 30th and 31st we were becalmed, and sounded constantly. The current set to the north-westward, which was pretty near the situation of the isle of Lobos. At half an hour past one after midnight, having founded thirty-three fathoms, I thought I was very near the isle, and gave the signal for casting anchor. At half past three we weighed, and saw the isle of Lobos in N. E. about a league and a half distant. The wind was S. and S. E. weak at first, but blew more fresh towards sun-rising, and we anchored in the bay of Montevideo the 31st in the afternoon. We had lost much time on account of the Etoile; because, besides the advantage of our being better sailers, that store-ship, which at leaving Rio Janeiro made four inches of water every hour, after a few days sail made seven inches in the same space of time, which did not allow her to crowd her sails.

We were hardly moored, when an officer came on board, being sent by the governor of Montevideo, to compliment us on our arrival, and informed us that orders had been received from Spain to arrest all the Jesuits, and to seize their effects: that the ship which brought these

dispatches had carried away forty fathers of that community, destined for the missions: that the order had already been executed in the principal houses without any difficulty or resistance; and that, on the contrary, these fathers bore their disgrace with resignation and moderation. I shall soon enter into a more circumstantial account of this great transaction, of which I have been able to obtain full information, by my long stay at Buenos Ayres, and the confidence with which the governor-general Don Francisco Bukarely [1] honoured me.

1767. August.

As we were to stay in Rio de la Plata till after the equinox, we took lodgings at Montevideo, where we settled our workmen, and made an hospital. This having been our first care, I went to Buenos Ayres, on the 11th of August, to accelerate our being furnished with the necessary provisions, by the provider-general of the king of Spain; at the same price as he had agreed to deliver them to his Catholic Majesty. I likewise wanted to have a conference with M. de Buccarelli, on the subject of what had happened at Rio-Janeiro; though I had already, by express, sent him the dispatches from Don Francisco de Madina. I found he had prudently resolved to content himself with sending an account of the hostilities of the viceroy of the Brasils to Europe, and not to make any reprisals. It would have been easy to him, to have taken the colony of Santo Sacramento in a few days; especially as that place was in want of every necessary, and had not yet obtained, in November, the convoy of articles and ammunition that were preparing to be sent thither, when we left Rio-Janeiro.

The governor-general made every thing as convenient as possible, towards quickly making up our wants. At the end of August, two schooners, laden with biscuit and flour for us, sailed for Montevideo; whither I likewise went to celebrate the day of St. Louis. I left the chevalier du Bouchage, an under-lieutenant, at Buenos Ayres, in order to get the remainder of our provisions on board; and to take care of our affairs there till our departure; which, I hoped, would be towards the end of September. I could not foresee that an accident would detain us six weeks longer. In a hurricane, blowing hard at S. W. the San Fernando, a register-ship, which

Damage which the Etoile receives.

was at anchor near the Etoile, dragged her anchors, ran foul of the Etoile at night; and, at the first shock, broke her bowsprit level with the deck. Afterwards the knee and rails of her head were carried away; and it was lucky that they separated, notwithstanding the bad weather, and the obscurity of the night, without being more damaged.

1767. September.

This accident greatly enlarged the leaks in the Etoile, which she had had from the beginning of her voyage. It now became absolutely necessary to unload this vessel, if not to heave her down [2], in order to discover and stop this leak, which seemed to lie very low, and very forward. This operation could not be performed at Montevideo; where, besides, there was not timber sufficient to repair the masts; I therefore wrote to the chevalier du Bouchage, to represent our situation to the marquis de Buccarelli; and to obtain, that by his leave the Etoile might be allowed to come up the river, and to go into the Encenada de Baragan; I likewise gave him orders to send timber and the other materials, which we should want thither.

1 Buccarelli.

2 Virer en quille.

The governor-general consented to our demands; and, the 7th of September, not being able to find any pilot, I went on board the Etoile, with the carpenters and caulkers of the Boudeuse, in

Navigation from Montevideo to Baragan.

order to sail the next morning, and undertake in person a navigation, which we were told was very hazardous. Two register-ships; the San-Fernando and the Carmen, provided with a pilot, were ready the same day, to sail for Montevideo to Encenada; and I intended to follow them; but the San-Fernando, which had got the pilot, named Philip, on board, weighed in the night, between the seventh and eighth, purely with a view of hiding his track from us; and left her companion in the same distress. However, we sailed on the eighth in the morning, preceded by our canoes; the Carman remaining to wait for a schooner to direct her route. In the evening we reached the San-Fernando, passed by her; and, on the tenth in the afternoon, we came to an anchor in the road of the Encenada: Philip, who was a bad pilot, and a wicked fellow, always steering in our water.

In this road I found the Venus frigate of twenty-six guns, and some merchant-ships; which were bound, together with her, to sail directly for Europe. I likewise found there la Esmeralda, and la Liebre; who were preparing to return to the Malouines, with provisions and ammunitions of all sorts; from whence they were to sail for the South Seas, in order to take in the Jesuits of Chili and Peru. There was likewise the xebeck [1] el Andaluz; which arrived from Ferrol, at the end of July, in company with another xebeck, named el Aventurero; but the latter was lost on the point of what is called the English-Sand; and the crew had time to save their lives. The Andaluz was preparing to carry prefects and missionaries to the inhabitants of Tierra del Fuego; the king of Spain being desirous of testifying his gratitude to those people, for the services they rendered the Spaniards of the ship la Concepcion, which was loft on their coasts in 1765.

I went on shore at Baragan, whither the chevalier du Bouchage had already sent part of the timber we wanted. He found it very difficult and expensive to collect it at Buenos Ayres, in the king's arsenal, and in some private timber-yards; the stores of both consisting of the timbers of such ships as were wrecked in the river. At Baragan we found no supplies; but, on the contrary, difficulties of many kinds; and every thing conspired to make all operations go on very slowly. The Encenada de Baragan is, indeed, merely a bad kind of bay, formed by the mouth of a little river, which is about a quarter of a league broad; but the depth of water is only in the middle, in a narrow tunnel; which is constantly filling more and more; and, in which, only ships drawing no more than twelve feet water can enter. In all the other parts of the river, there is not six inches of water during the ebb; but as the tides are irregular in Rio de la Plata; and the water sometimes high or low, for eight days together, according to the winds that blow, the landing of boats was connected with great difficulties. There are no magazines on shore; the houses, or rather huts, are but few, made of rushes, covered over with leather, and built without any regularity, on a barren soil; and their inhabitants are hardly able to get their subsistence; all which causes still more difficulties. The ships, which draw too much water to be able to enter this creek, must anchor at the point of Lara, a league and a half west. There they are exposed to all the winds; but the ground being, very good for anchoring, they may winter there, though labouring under many inconveniences.

1767. October.

I left M. de la Giraudais, at the point of Lara, to take care of what related to his ship; and I went to Buenos Ayres, from whence I sent him a large schooner, by which he might heave down as soon as he came into the Ençenada. For that purpose, it was necessary to unload part of the goods she had on board; and M. de Buccarelli gave us leave to deposit them on board the Esmeralda and the Liebre. The 8th of October the Etoile was able to go into port; and it appeared, that her repair would not take so much time as was at first expected. Indeed, they had hardly begun to unload her, when her leak diminished considerably; and she did not leak at all when she drew only eight feet of water forward. After taking up some planks of her sheathing, they saw that the seam of her entrance was entirely without oakum for the length of four feet and a half, from the depth of eight feet of her draught upwards. They discovered likewise two auger holes, into which they had not put the bolts. All these faults and damages being quickly repaired, new railing put on the head, a new bowsprit made and rigged, and the ship being new caulked all over, she returned to the point of Lara on the 21st, where she took in her lading again, from on board the Spanish frigates. In that road she likewise slowed the wood, flour, biscuit, and different provisions I sent her.

Departure of several vessels for Europe, and arrival of others.

From thence, the Venus and four other vessels laden with leather, sailed for Cadiz, at the end of September, having on board two hundred and fifty Jesuits, and the French families from the Malouines, seven excepted, who having no room in these ships, were obliged to wait for another opportunity. The marquiss of Buccarelli transported them to Buenos Ayres, where he provided them with subsistence and lodgings. At the same time we got intelligence of the arrival of the Diamante, a register ship, bound for Buenos Ayres, and of the San-miguel, another register ship, bound for Lima. The situation of the last ship was very distressing; after struggling with the winds at Cape Horn during, forty-five days, thirty-nine men of her crew being dead, and the others attacked by the scurvy, and a sea carrying away her rudder, she was obliged to bear away for this river, and arrived at the port of Maldonados seven months after leaving Cadiz, having no more than three sailors and a few officers that were able to do duty. At the request of the Spaniards we sent an officer with some sailors to bring her into the port of Montevideo. On the fifth of October the Spanish frigate la Aguila arrived there, having left Ferrol in March. She touched at the isle of St. Catherine, and the Portuguese had arrested her there at the same time that they stopped the Diligent at Rio Janeiro.

CHAP. VII.

Accounts of the missions in Paraguay, and the expulsion of the Jesuits from that province.

WHILST we carried on our preparations for leaving Rio de la Plata, the marquiss of Buccarelli made some on his part to go on the Uruguai. The Jesuits had already been arrested in all the other provinces of his department; and this governor-general intended to execute the orders of his catholic majesty, in person, in the missions. It depended upon the first steps that were taken, either to make the people consent to the alterations that were going to be made, or to plunge them again into their former state of barbarism. But before I give an account of what I have seen of the catastrophe of this singular government, I must speak something of its origin, progress, and form. I shall speak of *sine irâ & studio, quorum causas procul babeo*.

Date of the establishment of the missions.

In 1580 the Jesuits were first admitted into these fertile regions, where they have afterwards, in the reign of Philip the third, founded the famous missions, which in Europe go by the name of Paraguay, and in America, with more propriety, by that of Uruguay, from the river of that name, on which they are situated. They were always divided into colonies, which at first were weak and few, but by gradual progress have been encreased to the number of thirty-seven, viz. twenty-nine on the right side of the Uruguay, and eight on the left side, each of them governed by two Jesuits, in the habit of the order. Two motives, which sovereigns are allowed to combine, if they do not hurt each other, namely, religion and interest, made the Spanish monarch desirous of the conversion of the Indians; by making them catholics, they became civilized, and he obtained possession of a vast and abundant country; this was opening a new source of riches for the metropolis, and at the same time making proselytes to the true Deity. The Jesuits undertook to fulfil these projects; but they represented, that in order to facilitate the success of so difficult an enterprize, it was necessary they should be independent of the governors of the province, and that even no Spaniard should be allowed to come into the country.

Conditions agreed on between the court of Spain and the Jesuits.

The motive on which this demand was grounded, was the fear lest the vices of the Europeans should diminish the ardour of their proselytes, or even remove them farther from Christianity; and likewise lest the Spanish haughtiness should render a yoke, already too heavy, insupportable to them. The court of Spain, approving of these reasons, ordered that the missionaries should not be controuled by the governor's authority, and that they should get sixty thousand piastres a year from the royal treasure, for the expences of cultivation, on condition that as the colonies should be formed, and the lands be cultivated, the Indians should annually pay a piastre per head to the king, from the age of eighteen to sixty. It was likewise stipulated, that the missionaries should teach the Indians the Spanish language; but this clause it seems has not been executed.

Zeal and success of the missionaries.

The Jesuits entered upon this career with the courage of martyrs, and the patience of angels. Both these qualifications were requisite to attract, retain, and use to obedience and labour, a race of savage, inconstant men, who were attached to their indolence and independence. The obstacles were infinite, the difficulties encreased at each step; but zeal got the better of every

thing, and the kindness of the missionaries at last brought these wild, diffident inhabitants of the woods, to their feet. They collected them into fixed habitations, gave them laws, introduced useful and polite arts among them; and, in short, of a barbarous nation, without civilized manners, and without religious principles, they made a good-natured well governed people, who strictly observed the Christian ceremonies. These Indians, charmed with the persuasive eloquence of their apostles, willingly obeyed a set of men, who, they saw would sacrifice themselves for their happiness; accordingly, when they wanted to form an idea of the king of Spain, they represented him to themselves in the habit of the order of St. Ignatius.

Revolt of the Indians against the Spaniards.

However, there was a momentary revolt against his authority in the year 1757. The catholic king had exchanged the colonies on the left shore of the Uruguay against the colony of Santo Sacramento with the Portuguese. The desire of destroying the smuggling trade, which we have mentioned several times, had engaged the court of Madrid to this exchange. Thus the Uruguay became the boundary of the respective possessions of the two crowns. The Indians of the colonies, which had been ceded, were transported to the right hand shore, and they made them amends in money for their lost labour and transposition.

Causes of their discontent.

But these men, accustomed to their habitations, could not bear the thought of being obliged to leave the grounds, which were highly cultivated, in order to clear new ones. They took up arms: for long ago they had been allowed the use of them, to defend themselves from the incursions of the Paulists, a band of robbers, descended from Brasilians, and who had formed themselves into a republic towards the end of the sixteenth century. They revolted without any Jesuits ever heading them. It is however said, they were really kept in the revolted villages, to exercise their sacerdotal functions.

They take up arms and are defeated.

The governor-general of the province de la Plata, Don Joseph Andonaighi, marched against the rebels, and was followed by Don Joachim de Viana, governor of Montevideo. He defeated them in a battle, wherein upwards of two thousand Indians were slain. He then proceeded to conquer the country; and Don Joachim seeing what terror their first defeat had spread amongst them, resolved to subdue them entirely with six hundred men. He attacked the first colony, took possession of it without meeting any resistance; and that being taken, all the others submitted. At this time the court of Spain recalled Don Joseph Andonaighi, and Don Pedro Cevallos arrived at Buenos Ayres to replace him; Viana received orders at the same time to leave the missions, and bring back his troops. The intended exchange was now no longer thought of, and

The disturbances are appeased.

the Portuguese, who had marched against the Indians with the Spaniards, returned with them likewise. At the time of this expedition, the noise was spread in Europe of the election of king Nicholas, an Indian, whom indeed the rebels set up as a phantom of royalty.

The Indians appear disgusted with the administration of the Jesuits.

Don Joachim de Viana told me, that when he received orders to leave the missions, a great number of Indians, discontented with the life they led, were willing to follow him. He opposed it, but could not hinder seven families from accompanying him; he fettled them at the Maldonados, where, at present, they are patterns of industry and labour. I was surprised at what he told me concerning this discontent of the Indians. How is it possible to make it agree with all I had read of the manner in which they are governed? I should have quoted the laws of the missions as a pattern of an administration instituted with a view to distribute happiness and wisdom among men.

Indeed, if one casts a general view at a distance upon this magic government, founded by spiritual arms only, and united only by the charms of persuasion, what institution can be more honourable to human nature: It is a society which inhabits a fertile land, in a happy climate, of which, all the members are laborious, and none works for himself; the produce of the common cultivation is faithfully conveyed into public store-houses, from whence every one receives what he wants for his nourishment, dress, and house-keeping; the man who is in full vigour, feeds, by his labour, the new-born infant; and when time has consumed his strength, his fellow-citizens render him the same services which he did them before. The private houses are convenient, the public buildings fine; the worship uniform and scrupulously attended: this happy people knows neither the distinction of rank, nor of nobility, and is equally sheltered against super-abundance and wants.

The great distance and the illusion of perspective made the missions bear this aspect in my eyes, and must have appeared the same to every one else. But the theory is widely different from the execution of this plan of government. Of this I was convinced by the following accounts, which above a hundred ocular witnesses have unanimously given me.

Account of the interior government.

The extent of country in which the missions are situated, contains about two hundred leagues north and south, and about one hundred and fifty east and west, and the number of inhabitants is about three hundred thousand; the immense forests afford wood of all sorts; the vast pastures there, contain at least two millions of cattle; fine rivers enliven the interior parts of this country, and promote circulation and commerce throughout it. This is the Situation of the country, but the question now is, how did the people live there? The country was, as has been told, divided into parishes, and each parish was directed by two Jesuits, of which, one was rector, and the other his curate. The whole expence for the maintenance of the colonies was but small, the Indians being fed, dressed, and lodged, by the labour of their own bands; the greatest costs were those of keeping the churches in repair, all which were built and adorned magnificently. The other products of the ground, and all the cattle, belonged to the Jesuits, who, on their part, sent for the instruments of various trades, for glass, knives, needles, images, chaplets of beads, gun-powder and muskets. Their annual revenues consisted in cotton, tallow, leather, honey, and above all, in *maté*, a plant better known by the name of Paraguay tea, or South-Sea tea, of which that company had the exclusive commerce, and of which likewise the consumption is immense in the Spanish possessions in America, where it is used instead of tea.

The Indians shewed so servile a submission to their rectors, that not only both men and women suffered the punishment of flagellation, after the manner of the college, for public offences, but they likewise came of themselves to solicit this chastisement for mental faults. In every parish the fathers annually elected *corrégidors*, and their assistants, to take care of the minutiae of the government. The ceremony of their election was performed on new year's day, with great pomp, in the court before the church, and was announced by ringing of bells, and the playing of

a band of music. The newly elected persons came to the feet of the father rector to receive the marks of their dignity, which however did not exempt them from being whipped like the others. Their greatest distinction was that of wearing habits, whereas, a skirt of cotton stuff was the only dress of the other Indians of both sexes. The feasts of the parish, and that of the rector, were likewise celebrated by public rejoicings, and even by comedies, which probably resembled those ancient pieces of ours, called *mystères* or mysteries.

The rector lived in a great house near the church; adjoining to it were two buildings, in one of which were the schools for music, painting, sculpture, and architecture; and likewise, work-houses of different trades; Italy furnished them with masters to teach the arts, and the Indians, it is said, learn with facility: the other building contained a great number of young girls at work in several occupations, under the inspection of old women: this was named the *guatiguasu*, or the seminary. The apartment of the rector communicated internally with these two buildings.

This rector got up at five o'clock in the morning, employed an hour in holy meditation, and said his mass at half past six o'clock; they kissed his hands at seven o'clock, and then he publicly distributed an ounce of *maté* to every family. After mass, the rector breakfasted, said his breviary, conferred with the corregidores, four of whom were his ministers, and visited the seminary, the schools, and the work-shops. Whenever he went out, it was on horseback, and attended by a great retinue; he dined alone with his curate at eleven of the clock, then chatted till noon, and after that, made a *siesta* till two in the afternoon; he kept close in his interior apartments till it was prayer time, after which, he continued in conversation till seven in the evening; then the rector supped, and at eight he was supposed to be gone to bed.

From eight of the clock in the morning, the time of the people was taken up either in cultivating the ground, or in their work-shops, and the corregidores took care to see them employ their time well; the women spun cotton; they got a quantity of it every Monday, which they were obliged to bring back converted into spun yarn at the end of the week; at half an hour past five in the evening they came together to say the prayers of their rosary, and to kiss the hands of their rector once more, then came on the distribution of an ounce of *maté* and four pounds of beef for each family, which was supposed to consist of eight persons; at the same time they likewise got some maize. On Sundays they did no work; the divine worship took up more time; they were after that allowed to amuse themselves with plays as dull as the rest of their whole life.

Consequences drawn from it.

From this exact detail it appears that the Indians had in some manner no property, and that they were subject to a miserable, tedious uniformity of labour and repose. This tiresomeness, which may with great reason be called deadly or extreme, is sufficient to explain what has been told to us, that they quitted life without regret, and died without having ever lived or enjoyed life.

When once they fell sick, it seldom happened that they recovered, and being then asked whether they were sorry to be obliged to die, they answered, no; and spoke it as people whose real sentiments coincide with their words. We can no longer be surprised, that when the Spaniards penetrated into the missions, this great people, which was governed like a convent, should shew an ardent desire of forcing the walls which confined them. The Jesuits represented the Indians, upon the whole, as men incapable of attaining a higher, degree of knowledge than that of children; but the life they led, prevented these grown children from having the liveliness of little ones.

Expulsion of the Jesuits from the province of Plata.

The society were occupied with the care of extending their missions, when the unfortunate events happened in Europe, which overturned the work of so many years, and of so unwearied patience in the new world. The court of Spain having resolved upon the expulsion of the Jesuits, was desirous that this might be done at the same time throughout all its vast dominions. Cevallos was recalled from Buenos Ayres, and Don Francisco Buccarelli appointed to succeed

Measures taken at the court of Spain for this purpose.

him. He set out, being instructed in the business which he was intended for, and with orders to defer the execution of it till he received fresh orders, which would soon be sent him. The king's confessor, the count d'Aranda, and some ministers, were the only persons to whom this secret affair was entrusted. Buccarelli made his entry at Buenos Ayres in the beginning of 1767.

Measures taken by the governor-general of the province.

When Don Pedro de Cevallos was arrived in Spain, a packet was dispatched to the marquis of Buccarelli, with orders both for that province, and for Chili, whither he was to send them over land. This vessel arrived in Rio de la Plata in June, 1767, and the governor instantly dispatched two officers, one to Peru, and the other to Chili, with the dispatches from court, directed to them. He then sent his orders into the various parts of his province, where there were any Jesuits, viz. to Cordoua, Mendoza, Corrientes, Santa-Fé, Salta, Montevideo, and Paraguay. As he feared, that among the commanders of these several places, some might not act with the dispatch, secrecy, and exactness which the court required, he enjoined, by sending his orders to them, that they should not open them till on a certain day, which he had fixed for the execution, and to do it only in the presence of some persons, whom he named, and who served in the highest ecclesiastical and civil offices, at the above-mentioned places. Cordoua, above all, interested his attention. In that province was the principal house of the Jesuits, and the general residence of their provincial. There they prepared and instructed in the Indian language and customs, those who were destined to go to the missions, and to become heads of colonies; there their most important papers were expected to be found. M. de Buccarelli resolved to send an officer of trust there, whom he appointed the king's lieutenant of that place, and on whom, under this pretext, he sent a detachment of soldiers to attend.

It now remained to provide for the execution of the king's orders in the missions, and this was the most critical point. It was dubious whether the Indians would suffer the Jesuits to be arrested in the midst of the colonies, and this violent step must at all events have been supported by a numerous body of troops. Besides this, it was necessary, before they thought of removing the Jesuits, to have another form of government ready to substitute in their stead, and by that means to prevent confusion and anarchy. The governor resolved to temporize, and was contented at that time to write to the missions, that a corregidor and a cacique from each colony should be sent to him immediately, in order to communicate the king's letters to them. He dispatched this order with the greatest quickness, that the Indians might already be on the road, and beyond the missions, before the news of the expulsion of the Jesuits could reach thither. By this he had two aims in view; the one, that of getting hostages of the fidelity of the colonies, when the Jesuits would be taken from thence; the other, that of gaining the affection of the principal Indians, by the good treatment he intended for them at Buenos Ayres, and of instructing them in the new situation upon which they would enter; for, as soon as the restraint would be taken away, they were to enjoy the same privileges, and have the same property as the king's other subjects.

The secret is near being divulged by an unforeseen accident.

Every measure was concerted with the greatest secrecy, and though people wondered that a vessel should arrive from Spain without any other letters than those for the general, yet they were very far from suspecting the cause of it.

The moment of the general execution was fixed to the day when all the couriers were supposed to have arrived at their different destinations, and the governor waited for that moment with impatience, when the arrival of the two xebecs [1] of the king from Cadiz, the Andaluz and the Adventurero, was near making all these precautions useless. The governor-general had ordered the governor of Montevideo, that in case any vessels should arrive from Europe, he should not allow them to speak with any person whatsoever, before he had sent him word of it; but one of the two xebecs being in the forlorn situation we have before mentioned, at the entrance of the river, it was very necessary to save the crew of it, and give her all the assistance which her situation required.

The two xebecs had sailed from Spain, after the Jesuits had been arrested there, and this piece of news could by no means be prevented from spreading. An officer of these ships was immediately sent to M. de Buccarelli, and arrived at Buenos Ayres the 9th of July, at ten in the evening.

Conduct of the governor-general.

The governor did not lose time, he instantly dispatched orders to all the commanders of the places, to open their former packets of dispatches, and execute their contents with the utmost celerity. At two of the clock after midnight, all the couriers were gone, and the two houses of the Jesuits at Buenos Ayres invested, to the great astonishment of those fathers, who thought they were dreaming, when roused from their sleep in order to be imprisoned, and to have their papers seized. The next morning an order was published in the town, which forbade, by pain of death, to keep up any intercourse with the Jesuits, and five merchants were arrested, who intended, it is said, to send advices to them at Cordoua.

The Jesuits are arrested in all the Spanish towns.

The king's orders were executed with the same facility in all the towns. The Jesuits were surprised every where, without having the least notice, and their papers were seized. They were immediately sent from their houses, guarded by detachments of soldiers, who were ordered to fire upon those that should endeavour to escape. But there was no occasion to come to this extremity. They shewed the greatest resignation, humbling themselves under the hand that smote them, and acknowledging, as they said, that their sins had deserved the punishment which God inflicted on them. The Jesuits of Cordoua, in number above a hundred, arrived towards the end of August, at the Encenada, whither those from Corrientes, Buenos Ayres, and Montevideo, came soon after. They were immediately embarked, and the first convoy sailed, as I have already said, at the end of September. The others, during that time, were on the road to Buenos Ayres, where they should wait for another opportunity.

1 Chambekins.

Arrival of the caciques and corregidors at Buenos Ayres from the missions.

On the 13th of September arrived all the corregidors, and a cacique of each colony, with some Indians of their retinue. They had left the missions before any one guessed at the reason of their journey there. The news which they received of it on the road had made some impression on them, but did not prevent their continuing the journey. The only instruction which the rectors gave their dear proselytes at parting, was, to believe nothing of what the governor-general should tell them: "Prepare, my children," did every one tell them, "to hear many untruths." At their arrival, they were immediately sent to the governor, where I was present at their reception. They entered on horseback to the number of a hundred and twenty, and formed a crescent in two lines; a Spaniard understanding the language of the *Guaranis*, served thus as an interpreter.

They appear before the governor-general.

The governor appeared in a balcony; he told them, that they were welcome; that they should go to rest themselves, and that he would send them notice of the day which he should fix in order to let them know the king's intentions. He added, in general, that he was come to release them from slavery, and put them in possession of their property, which they had not hitherto enjoyed. They answered by a general cry, lifting up their right hands to heaven, and wishing all prosperity to the king and governor. They did not seem discontented, but it was easy to discover more surprize than joy in their countenance. On leaving the governor's palace, they were brought to one of the houses of the Jesuits, where they were lodged, fed, and kept at the king's expence. The governor, when he sent for them, expressly mentioned the famous Cacique Nicholas, but they wrote him word, that his great age and his infirmities did not allow him to come out.

At my departure from Buenos Ayres, the Indians had not yet been called to an audience of the general. He was willing to give them time to learn something of the language, and to become acquainted with the Spanish customs. I have been several times to see them. They appeared to me of an indolent temper, and seemed to have that stupid air so common in creatures caught in a trap. Some of them were pointed out to me as very intelligent, but as they spoke no other language but that of the *Guaranis*, I was not able to make any estimate of the; degree of their knowledge; I only heard a cacique play upon the violin, who, I was told, was a great musician; he played a sonata, and I thought I heard the strained sounds of a serinette. Soon after the arrival of these Indians at Buenos Ayres, the news of the expulsion of the Jesuits, having reached the missions, the marquis de Bucarelli received a letter from the provincial, who was there at that time, in which he assured him of his submission, and of that of all the colonies to the king's orders,

Extent of the missions.

These missions of the *Guaranis* and *Tapes*, upon the *Uruguay*, were not the only ones which the Jesuits founded in South America. Somewhat more northward they had collected and submitted to the same laws, the *Mojos*, *Chiquitos*, and the *Avipones*. They likewise were making progresses in the south of *Chili*, towards the isle of *Chiloé*; and a few years since, they have opened themselves a road from that province to *Peru*, passing through the country of the *Chiquitos*, which is a shorter way than that which was followed till then. In all the countries into which they penetrated, they erected posts, on which they placed their motto; and on the

map of their colonies, which they have settled; the latter are placed under the denomination of *Oppida Christianorum*.

It was expected, that in seizing the effects of the Jesuits in this province, very considerable sums of money would be found: however, what was obtained that way, amounted to a mere trifle. Their magazines indeed were furnished with merchandizes of all sorts, both of the products of the country, and of goods imported from Europe. There were even many sorts which could not have a sale in these provinces. The number of their slaves was considerable, and in their house at Cordoua alone, they reckoned three thousand five hundred.

I cannot enter into a detail of all that the public of Buenos Ayres pretends to have found in the papers of the Jesuits; the animosity is yet too recent to enable me to distinguish true imputations from false ones. I will rather do justice to the majority of the members of this society, who were not interested in its temporal affairs. If there were some intriguing men in this body, the far greater number, who were sincerely pious, did not consider any thing in the institution, besides the piety of its founder, and worshipped God, to whom they had consecrated themselves, in spirit and in truth. I have been informed, on my return to France, that the marquis de Bucarelli set out from Buenos Ayres for the missions, the 14th of May, 1768; and that he had not met with any obstacle, or resistance, to the execution of his most catholic majesty's orders. My readers will be able to form an idea of the manner in which this interesting event was terminated, by reading the two following pieces, which contain an account of the first scene. It is a narrative of what happened at the colony of Yapegu, situated upon the Uruguay, and which lay the first in the Spanish general's way; all the others have followed the example of this.

Account of the governor-general's entry into the missions.

Translation of a letter, from A captain of the grenadiers of the regiment of Majorca, commanding one of the detachments of the expedition into Paraguay.

Yapegu, the 19th July, 1768.

"YESTERDAY we arrived here very happily; the reception given to our general has been most magnificent, and such as could not be expected from so simple, a people, so little accustomed to shows. Here is a college, which has very rich: and numerous church ornaments; there is likewise a great quantity of plate. The settlement is somewhat less than Montevideo, but more regularly disposed, and well peopled. The houses are so uniform, that after seeing one, you have seen them all; and the same, after you have seen one man and woman, you have seen them all, there being not the least difference in the manner in which they are dressed. There are many musicians, but they are only middling performers.

As soon as we arrived near this mission, the governor-general gave orders to go and seize the father provincial of the Jesuits, and six other fathers, and to bring them to a place of safety. They are to embark in a few days on the river Uruguay. However, we believe they will stay at Salto, in order to wait till the rest of their brethren have undergone the same fate.

We expected to make a stay of five or six days at Yapegu, and then to continue our march to the last mission. We are very well pleased with our general, who has procured us all possible refreshments. Yesterday we had an opera, and shall have another representation of it to-day. The good people do all they can, and all they know.

Yesterday we likewise saw the famous Nicolas, the same whom people were so desirous to confine. He was in a deplorable situation, and almost naked. He is seventy years of age, and seems to be a very sensible man. His excellency spoke with him a long time, and seemed very much pleased with his conversation.

This is all the news I can inform you of."

Relation published at Buenos Ayres of the entry of his excellency Don Francisco Bucarelli y Ursua, in the mission of Yapegu, one of those belonging to the Jesuits, among the nations of Guaranis on his arrival there the 18th of July, 1768.

At eight o'clock in the morning, his excellency went out of the chapel of St. Martin, at one league's distance from Yapegu. He was accompanied by his guard of grenadiers and dragoons, and had detached two hours before the companies of grenadiers of Majorca, in order to take possession of, and get ready every thing at the river of Guavirade, which must be crossed in canoes and ferries. This rivulet is about half a league from the colony. As soon as his excellency had crossed the rivulet, he found the caciques and corregidores of the missions, who attended with the Alferes of Yapegu, bearing the royal standard. His excellency having received all the honours and compliments usual on such occasions got on horseback, in order to make his public entry. The dragoons began the march; they were followed by two adjutants, who preceded his excellency; after whom came the two companies of grenadiers of Majorca, followed by the retinue of the Caciques and Corregidores, and by a great number of horsemen from these parts.

They went to the great place facing the church. His excellency having alighted, Don Francisco Martinez, chaplain of the expedition, attended on the steps before the porch to receive him; he accompanied him to the *Presbyterium*, and began the *Te Deum*; which was sung and performed by musicians, entirely consisting of guaranis. During this ceremony, there was a triple discharge of the artillery. His excellency went afterwards to the lodgings, which he had chosen for himself, in the college of the fathers; round which the whole troop encamped, till, by his order, they went to take their quarters in the *Guatiguasa*, or *la Casa de las recogidas*, house of retirement for women. [1]

1 The Jesuits in Paraguay have been so much the object of private conversation, and of public contest, that it is a wonder the public is still at a loss, in regard to the real situation of their affairs. The account published here by Mr. Bougainville, must, no doubt, greatly contribute to throw a light on the transactions in Paraguay, of which so little is known with any degree of certainty. A few remarks taken from the ingenious *Marquis di Pau's Recherches sur les Americains*, will, we hope, not be disagreeable to the readers.

In the year 1731, the Audiencia of Chuquisaca, in the province of *las Charcas*, found it necessary to empower the *Protector of the Indians*, i. e. the solicitor general for them, and a member of their body, to visit the famous Paraguay missions, and to inquire into the truth of the various unfavourable reports spread about them. *Don Joseph de Antequera*, a man of abilities, great integrity, and superior courage, was then invested with the dignity of Protector of the Indians. Accompanied only by one *Alguazil Major*, called *Joseph de Mena*; and with the deed, empowering him with the visitation of the missions, he went with spirit on his business; and after his arrival at the city of Assumption, he acquainted the Jesuits with the commission. The reverend fathers told him, that he had taken in vain the pains of coming to their missions, where he would never get admittance; and if he should attempt to force his way, he would repent of it. Antequera did neither know the bad character of these people, nor did he fear their threats, and went therefore on his intended journey. But he was soon surrounded by a large detachment of armed Indians, with Jesuits at their head, who fell upon him; and he escaped by a sudden flight only.

The unfortunate Alguazil; being willing to encounter a German Jesuit, was dangerously wounded. The Jesuits, not contented with this inconsiderate step, accused Antequera, as an adventurer, who had attempted to assume the dignity of a king of Paraguay, at the city of Assumption; but that the reverend fathers, as faithful subjects to his Catholic Majesty, had driven him out by main force; and they requested, therefore, to be recompensed for this signal Service to their sovereign.

Don Armendariz, Marquis de Castel Fuerte, thirty-third viceroy of Peru, entirely devoted to the Jesuits, sent Don Joseph de Antequera, in consequence of this accusation, immediately to a dungeon. He was examined; and though his counsellors had written five thousand sheets in his defence, he was, however, hanged for the crime of revolting against his sovereign, the fifth of June, together with his assistant Joseph de Mena, who was still very ill from the wound received at Assumption. Lima and all Peru revolted against their viceroy, on the account of so shocking and tyrannical an action. The troops were sent to quell the riots. The blood of thousands flowed in the streets of Lima, and stained the vallies of Peru. All the men of integrity and honour at Lima, Cuseo, Cuença, and Chuquisaca took up mourning for Antequera, the innocent victim of the revenge of the pious fathers, and of the despotism of the arbitrary viceroy, their tool, This transaction ruined the credit of the Jesuits in Peru.

The reverend missionaries found means to settle extensive establishments on the Uruguay, and the interior parts of Paraguay, upon the Pilco Mayo, and other rivers. They collected first, by gentle means, some of the Indian tribes into small settlements, taught them husbandry, and the most necessary arts; and afterwards, music, painting, and sculpture; all were instructed in the use of arms. By the help of these first colonies, they often forced the free rambling tribes of interior America, under the holy yoke of the gospel, and into subjection to these zealous missionaries. The poor wretches were then cloathed with a calico shirt, and got their allowance of meat, maize, and caamini; but they were in return obliged to drudge for the good fathers, in planting the Paraguay tea, cotton, tobacco, and sugar. Every ounce of cotton and caamini raised by these slaves must be delivered into the society's store-houses, from whence they were transported and sold for the benefit of the missionaries: those who concealed any of the above articles, got twelve lashes, in honour of the twelve apostles, and were confined to fasting during three days in the public work-house. Benedict XIV. the head of the Romish church, a man, whose humanity and extensive learning is so universally known, published two bulls against the Jesuits, wherein he excommunicates them, for the practice of enslaving the poor proselytes, and keeping them no better than animals; (whom men deprive of their liberty, and domesticate them with a view of making use of them in the most laborious employments) and for using religion as a cloak to oppression, despotism, and tyranny; in order to deprive free-born beings and their fellow-creatures of liberty, the first and most precious of all their enjoyments and privileges in this present life. These bulls will be for ever the strongest proofs of the truth of these assertions, and of the specious tyranny of the Jesuits.

The iniquitous practices in regard to the trade of the Paraguay-tea, are so well stated, that whole tribes of Indians were brought to the dilemma either to enlist as bondmen to the Jesuits, or to be starved; the complaints of so many Indian plantations of South-Sea tea destroyed by the Jesuits, were always heard, examined, and reported to the court of Spain; but the influence of the Jesuits prevented the council of the Indies from taking any steps for the punishment of the pious fathers; and they would still remain unknown and unpunished, had not this society been so suddenly involved in their ruin, by the precaution of the court of Spain. F.

Let us now continue the account of our voyage; in which the detail of the revolution that happened in the missions, has been one of the most interesting circumstances.

CHAP. VIII.

Departure from Montevideo; run to Cape Virgin; entrance into the Strait; interview with the Patagonians; navigation to the isle of St. Elizabeth.

Nimborum in patriam, loca foeta furentibus austris. Virg. Æneid. Lib. 1.

The Etoile comes down from Baragan to Montevideo.

THE repair and loading of the Etoile took us up all October, and cost us a prodigious expence; we were not able to balance our accounts with the provisor-general, and the other Spaniards who had supplied our wants, till the end of this month. I paid them with the money I received, as a reimbursement for the cession of the Malouines, which I thought was preferable to a draught upon the king's treasury. I have continued to do the same in regard to all the expenses, at the various places we had occasion to touch at in foreign countries. I have bought what I wanted much cheaper, and obtained it much sooner by this means.

Difficulty of this navigation.

The 31st of October, by break of day, I joined the Etoile, some leagues from the Encenada; she having sailed from thence for Montevideo the preceding day. We anchored there on the third of

1767. November.

November, at seven in the evening. The necessity of finding out a channel, by constant soundings, between the Ortiz sand-bank, and another little bank to the southward of it, both of which have no beacons on them, makes this navigation subject to great difficulties: the low situation of the land to the south, which therefore cannot be seen with ease, increases the difficulties. It is true, chance has placed a kind of beacon almost at the west point of the Ortiz bank. These were the two masts of a Portuguese vessel, which was lost there, and happily stands upright. In the channel you meet with four, four and a half, and five fathoms of water; and the bottom is black ooze; on the extremities of the Ortiz-bank, it is red sand. In going from Montevideo to the Encenada, as soon as you have made the beacon in E. by S. and have five fathoms of water, you have passed the banks. We have observed 15 deg. 30. min. N.E. variation in the channel.

Loss of three sailors.

This small passage cost us three men, who were drowned; the boat getting foul under the ship, which was wearing, went to the bottom; all our efforts sufficed only to save two men and the boat, which had not lost her mooring-rope. I likewise was sorry to see, that, notwithstanding the repairs the Etoile had undergone, she still made water; which made us fear that the fault lay in the caulking of the whole water-line; the ship had been free of water till she drew thirteen feet.

Preparations for leaving Rio de la Plata.

We employed some days to stow all the victuals into the Boudeuse, which she could hold, and to caulk her over again; which was an operation, that could not be done sooner, on account of the absence of her caulkers, who had been employed in the Etoile; we likewise repaired the boat of the Etoile; cut grass for the cattle we had on board; and embarked whatever we had on

shore. The tenth of November was spent in swaying up our top-masts and lower yards, and setting up our rigging, &c. We could have sailed the same day, if we had not grounded. On the 11th the tide coming in, the ships floated, and we cast anchor at the head of the road; Where vessels are always a-float. The two following days we could not sail, on account of the high sea; but this delay was not entirely useless. A schooner came from Buenos Ayres, laden with flour, and we took sixty hundred weight of it, which we made shift to stow in our ships. We had now victuals for ten months; though it is true, that the greatest part of the drink consisted of brandy.

Condition of the crews, at our sailing from Montevideo.

The crew was in perfect health. The long stay they made in Rio de la Plata, during which a third part of them alternately lay on shore, and the fresh meat they were always fed with, had prepared them for the fatigues and miseries of all kinds, which we were obliged to undergo. I left at Montevideo my pilot, my master-carpenter, my armourer, and a warrant-officer of my frigate; whom age and incurable infirmities prevented from undertaking the voyage. Notwithstanding all our care, twelve men, soldiers and sailors, deserted from the two ships. I had, however, taken some of the sailors at the Malouines, who were engaged in the fishery there; and likewise an engineer, a supercargo, and a surgeon; by this means my ship had as many hands as at her departure from Europe; and it was already a year since we had left the river of Nantes.

Departure from Montevideo.

The 14th of November, at half past four in the morning, wind due north, a fine breeze, we sailed from Montevideo.

The position astronomically determined.

At half past eight we were N. and S. off the isle of Flores; and at noon twelve leagues E. and E. by S. from Montevideo; and from hence I took my point of departure in $34^{\circ} 54' 40''$ S. la., and $58^{\circ} 57' 30''$ W. long. from the meridian of Paris. I have laid down the position of Montevideo, such as M. Verron has determined it by his observations; which places its longitude $40' 30''$ more W. than Mr. Bellin lays it down in his chart. I had likewise profited of my stay on shore, to try my octant upon the distances of known stars; this instrument always made the altitude of every star too little by two minutes; and I have always since attended to this correction, I must mention here, that in all the course of this Journal, I give the bearings of the coasts, such as taken by the compass; whenever I give them corrected, according to the variations, I shall take care to mention it.

Soundings and navigation to the straits of Magalhaens.

On the day of our departure, we saw land till sun-set; our soundings constantly increased, and changed from an oozy to a sandy bottom; at half past six of the t clock we found thirty-five fathom, and a grey sand; and the Etoile, to whom I gave a signal for sounding on the fifteenth in the afternoon, found sixty fathom, and the same ground: at noon we had observed $36^{\circ} 1'$ of latitude. From the 16th to the 21st we had contrary winds, a very high sea, and we kept the most advantageous boards in tacking under our courses and close-reefed top-sails; the Etoile had struck her topgallant masts, and we sailed without having our's up. The 22^d it blew a hard gale, accompanied with violent squalls and showers, which continued all night; the sea was very

dreadful, and the Etoile made a signal of distress; we waited for her under our fore-sail and main-sail, the lee clue-garnet hauled up. This store-ship seemed to have her fore top-sail-yard carried away. The wind and sea being abated the next morning, we made sail, and the 24th I made the signal for the Etoile to come within hail, in order to know what she had suffered in the last gale. M. de la Giraudais informed me, that besides his fore top-sail yard, four of his chain plates [1] had likewise been carried away; he added, that all the cattle he had taken in at Montevideo, had been lost, two excepted: this misfortune we had shared with him; but this was no consolation, for we knew not when we should be able to repair this loss. During the remaining part of this month, the winds were variable, from S. W. to N.W; the currents carried us southward with much rapidity, as far as 45° of latitude, where they became insensible. We sounded for several days successively without finding ground, and it was not till the 27th at night, being in the latitude of about 47° , and, according to our reckoning, thirty-five leagues from the coast of Patagonia, that we sounded seventy fathom, oozy bottom, with a fine black and grey sand. From that day till we saw the land, we had sounding in 67, 60, 55, 50, 47, and at last forty fathom, and then we first got sight of Cape Virgins. [2] The bottom was sometimes oozy, but always of a fine sand, which was grey, or yellow, and sometimes mixed with small red and black gravel.

Hidden rock not taken notice of in the charts.

I would not approach too near the coast till I came in latitude of 49° , on account of a sunken rock or vigie, which I had discovered in 1765, in $48^{\circ} 30'$ south latitude, about six or seven leagues off shore. I discovered it in the morning, at the same moment as I did the land, and having taken a good observation at noon, the weather being very fair, I was thus enabled to determine its latitude with precision. We ran within a quarter of a league of this rock, which the first person who saw it, originally took to be a *grampus*.

1767. December.

The 1st and 2d of December, the winds were favourable from N. and N. N. E; very fresh, the sea high, and the weather hazy; we made all the sail we could in day time, and passed the nights under our fore-sail, and close-reefed top-sails. During all this time we saw the birds called *Quebrantabuessos*, or *Albatross*, and what in all the seas in the world is a bad sign, petrels, which disappear when the weather is fair, and the sea smooth. We likewise saw seals, penguins, and a great number of whales. Some of these monstrous creatures seemed to have their skin covered with such white vermiculi, which fasten upon the bottoms of old ships that are suffered to rot in the harbours. On the 30th of November, two white birds, like great pigeons, perched on our yards. I had already seen a flight of these birds cross the bay of the Malouines.

Sight of Cape Virgins. It's position.

On the 2d of December in the afternoon, we discovered Cape Virgins, and we found it bore S. about seven leagues distant. At noon I had observed 52° S. lat. and I was now in $52^{\circ} 3' 30''$ of latitude, and in $71^{\circ} 12' 20''$ of longitude west from Paris.

1 Chaines de haubans. 2 Cap des Vierges, called Cape Virgin Mary by Lord Anson and Sir John Narborough. F.

This position of the ship, together with the bearing, places Cape Virgins in $52^{\circ} 23'$ of latitude, and in $71^{\circ} 25' 20''$ of longitude west from Paris, As Cape Virgins is an interesting point in geography, I must give an account of the reasons which induced me to believe that the position I give is nearly exact.

Discussion upon the position given to Cape Virgin.

The 27th of November in the afternoon, the chevalier du Bouchage had observed eight distances of the moon from the sun, of which the mean result had given him the west longitude of the ship, in $65^{\circ} 0' 30''$ for one hour, 43 min. 26 sec. of true time, M. Verron, on his part, had observed five distances, the result of which gave for our longitude, at the same instant, $64^{\circ} 57'$ The weather was fair, and extremely favourable for observations. The 29th at 3 hours 57 min. 35 sec. true time, M. Verron, by five observations of the distance of the moon from the sun, determined the ship's west longitude, at $67^{\circ} 49' 30''$.

Now, by following the longitude determined the 27th of November, taking the medium between the result of the observations of the chevalier du Bouchage and those of M. Verron, in order to fix the longitude of the ship, when we got sight of Cape Virgins, the longitude or that Cape will be $71^{\circ} 29' 42''$ west from Paris. The observations made the 29th afternoon, likewise referred to the place of the ship, when we made the Cape, would give a result of $38' 47''$ more westward. But it seems to me that those of the 27th ought rather to be followed, though two days more remote, because they were made in a greater number by two observers, who did not communicate their observations to each other, and however did not differ more than $3' 30''$. They carry an appearance of probability which cannot well be objected to. Upon the whole, if a medium is to be taken between the observations of both days, the longitude of Cape Virgins will be $71^{\circ} 49' 5''$, which differs only four leagues from the first determination, which answers within a league to that which the reckoning of my course gave me, and which I follow for this reason.

This longitude of Cape Virgin is more westerly by $42' 20''$ than that which M. Bellin places it in, and this is the same difference which appears in his position of Montevideo, of which we have given an account in the beginning of this chapter. Lord Anson's chart assigns for the longitude of Cape Virgins, 72° west from London, which is near 75° west from Paris; [1] a much more considerable error, which he likewise commits at the mouth of the river Plata, and generally along the whole coast of Patagonia.

Digression upon the instrument proper for observing the latitude at sea.

The observations which we have now mentioned, have been made with the English octant. This method of determining the longitude, by means of the distances of the moon from the sun, or from the stars in the zodiac, has been known for several years. Mess. de la Caille and Daprès have particularly made use of it at sea, likewise employing Hadley's octant. But as the degree of accuracy obtained by this method depends in a great measure upon the accuracy of the instrument with which you observe, it follows that M. Bouguer's heliometer, if one could measure great angles with it, would be very fit for rectifying these observations of distances. The Abbé de la Caille probably has thought of that, because he got one made, which would measure arcs of six or seven degrees; and if in his works he does not speak of it as an instrument fit for observing at sea, it is because he foresaw the difficulty of using it on board a ship.

1 $74^{\circ} 25'$: Paris being $2^{\circ} 25'$ E, from London: vide Ferguson's Tables. F.

M. Verron brought on board with him an instrument called a megameter, which he has employed in the other voyages he made with M. de Charnieres, and which he has likewise made use of on this. This instrument appeared to be very little different from the heliometer of M. Bouguer, except that the screw by which the objectives move, being longer, it places them at a greater distance asunder, and by that means makes the instrument capable of measuring angles of ten degrees, which was the limit of M Verron's megameter. It is to be wished, that by lengthening the screw, we were able to augment its extension still more, it being confined in too narrow bounds to allow a frequent repetition, and even to make the observations exact but the laws of dioptrics limit the removing of the objectives. It is likewise necessary to remedy the difficulty which the Abbé de la Caille foresaw, I mean, that which arises from the element on which the observation must be made. In general, it seems that the reflecting quadrant of Hadley would be preferable, if it were equally accurate.

Difficulties on entering the straits.

From the 2d of December in the afternoon, when we got sight of Cape Virgins, and soon after of Terra del Fuego, the contrary wind and the stormy weather opposed us for several days together. We plyed to windward the 3d till six in the evening, when the winds becoming more favourable, permitted our bearing away for the entrance of Magalhaens' Straits: this lasted but a short time; at half past seven it became quite calm, and the coasts covered with fogs; at ten it blew fresh again, and we passed the night by plying to windward. The 4th, at three o'clock in the morning, we made for the land with a good northern breeze; but the weather which was rainy and hazy intercepting our sight of it, we were obliged to stand off to sea again. At five in the morning, in a clear spot, we perceived Cape Virgins, and bore away in order to enter the straits; almost immediately the wind changed to S. W. whence it soon blew with violence, the fog became thicker, and we were obliged to lay-to between the two shores of Terra del Fuego and the continent.

Our fore-sail was split the fourth in the afternoon; and we having sounded, almost at the same moment, only twenty fathom, the fear of the breakers, which extend S. S. E. off Cape Virgins, made me resolve to scud under our bare poles; especially as this manœuvre facilitated the operation of bending another fore-sail to the yard. These soundings, however, which made me bear away, were not alarming; they were those in the channel, as I have since learnt, by sounding with a clear view of the land. I shall add, for the use of those who may be plying here

Observations on the nature of the ground at the entrance of the straits.

in thick weather, that a gravelly bottom shews that they are nearer the coast of Terra del Fuego than to the continent; where they will find a fine sand, and sometimes oozy bottom.

At five o'clock in the evening we brought to again, under the main and mizen stay-sails; at half past seven of the clock the wind abated, the sky cleared up, and we made sail; but with disadvantageous tacks, which brought us further from the coast; and, indeed, though on the 5th the weather was very fair, and the wind favourable, we did not see the land till two in the afternoon; when it extended from S. by W. to S. W. by W. about ten leagues off. At four o'clock we again discovered Cape Virgins; and we made sail in order to double it, at the distance of about a league and a half, or two leagues. It is not adviseable to come nearer, on account of a bank, which lies off the Cape, at about that distance. I am even inclined to believe, that we passed over the tail of that sand; for as we sounded very frequently, between two soundings, one of twenty-five and the other of seventeen fathom, the Etoile, which sailed in our wake, made signal of eight fathom; but the moment after she deepened her water.

Nautical remarks upon the entrance of the straits.

Cape Virgins is a table-land, of a middling height; it is perpendicular at its extremity; the view of it given by lord Anson, is most exactly true. At half past nine in the evening, we had brought the north point of the entrance to the straits to bear W. from which a ledge of rocks extends a league into the sea. We ran under our close-reefed fore-top-sail and lower sails hauled up, till eleven o'clock at night, when Cape Virgins bore N. of us. It blew very fresh; and the gloominess of the weather, seeming to threaten a storm, determined me to pass the night standing off and on.

The 6th, at break of day, I ordered all the reefs out of the top-sails, and run to W. N. W. We did not see land, till half past four o'clock, when it appeared to us that the tides had carried us to the S. S. W. At half after five, being about two leagues from the continent, we discovered Cape Possession, being W. by N. and W. N. W. This Cape is very easily known; it is the first head-land from the north point, at the entrance of these straits. It is more southerly than the rest of the coast, which afterwards forms a great gulf, called *Possession Bay*, between this Cape and the next narrow gut. We had likewise sight of Terra del Fuego. The winds soon changed to the ordinary points of W. and N. W. and we ran the most advantageous tacks for entering the strait, endeavouring to come close to the coast of Patagonia, and taking advantage of the tide, which then set to the westward.

At noon we had an observation; and the bearings taken at the same time gave me the same latitude, within a minute, for Cape Virgins, as that which I had concluded from my observations of the third of this month. We likewise made use of this observation, to ascertain the latitude of Cape Possession, and of Cape Espiritu Santo, on Terra del Fuego.

We continued to ply to windward, under our courses and top-sails, all the sixth; and the next night, which was very clear, often sounding, and never going further than three leagues from the coast of the continent. We got forward very little, by this disagreeable manœuvre; losing as much by the tides as we gained by them; and the 7th, at noon, we were still at Cape Possession.

Description of Cape Orange.

Cape Orange bore S. W. about six leagues distant. This cape is remarkable by a pretty high hillock; steep towards the sea-side, and forms to the south-ward the first gut, or narrow pass, in the straits. [1]

Its rocks.

Its point is dangerous, on account of a ledge which extends to the N. E. of the cape, at least three leagues into the sea. I have very plainly seen the sea break over it. At one o'clock, after noon, the wind having shifted to N. N. W. we made advantage of it to continue our voyage.

1 From Cape Virgin, till to the entrance of the first, *goulet*, we may reckon 14 or 15 leagues; and the straits are in every part of this interval, between five and seven leagues wide. The north coast, as far as Cape Possession, is uniform, but little elevated, and very healthy. From this cape onward, one must be careful to avoid the rocks, which are situated in a part of the bay of the same name. When the hillocks, which I have named the *Quatre fils Aymond* [†] only offer two to sight, in form of a gate, you are then opposite the said rocks.

† These rocks are called *Ass's Ears*, by Sir John Narborough. F,

At half past two we were come to the entrance of the gut; another obstacle attended us there; we were not able, with a fine fresh breeze, and all our sails set, to stem the tide. At four o'clock it ran six knots a-long side of us, and we went a-stern. We persisted in vain to strive against it. The wind was less constant than we were, and obliged us to return. It was to be feared, that we might be becalmed in the gut; exposed to the current of the tide; which might carry us on the ledges of the capes which form its entrance at E. and W.

Anchoring in Possession-bay.

We steered N. by E. in search of a good anchoring ground, in the bottom of Possession-bay; when the Etoile, which was nearer the coast than we were, having passed all at once from twenty fathom to five, we bore away, and stood east, in order to avoid a ledge of rocks, which seemed to lie in the bottom, and in the whole circuit of the bay. During some time we found a bottom of nothing but rocks and pebbles; and it was seven at night, being in twenty fathom, the ground mud and sand, with black and white gravel, when we anchored about two leagues from the land. Possession-bay is open to all winds, and has but very bad anchoring ground. In the bottom of this bay arise five hills; one of which is a very considerable one; the other four are little and pointed. We have called them *le Pere et les quatre fils Aymond*; they serve as a conspicuous mark for this part of the straits. At night we sounded at the several times of the tide, without finding any sensible difference in the depth. At half an hour past eight it set to the west; and at three in the morning to the eastward.

The eighth in the morning we set sail under courses, and double-reefed top sails; the tide was contrary to us, but we stemmed it with a fine N. W. breeze. [1] At eight o'clock the wind headed us, and we were obliged to ply to windward; now and then receiving violent squalls of wind. At ten o'clock, the tide beginning to set in westward with sufficient force, we lay to, under our top sails, at the entrance of the first gut, driving with the current, which carried us to windward; and tacking about whenever we found ourselves too near either coast. Thus we passed the first narrow entrance or gut [2] in two hours; notwithstanding the wind was right against us, and blew very hard.

This morning the Patagonians, who had kept up fires all night, at the bottom of Possession-bay, hoisted a white flag on an eminence; and we answered it by hoisting that of our ships. These Patagonians certainly are the same which the Etoile saw in June 1766, in Boucault's-bay, and with whom she left this flag, as a sign of alliance. The care they have taken to preserve it; shews that good-nature, a due regard of their word, or, at least, gratitude for presents received, are the characteristics of these men.

We likewise saw, very distinctly, when we were in the gut, about twenty men on Terra del Fuego. They were dressed in skins, and ran as fast as possible along the coast, parallel to our course. They seemed likewise from time to time to make signs to us with their hands, as if they wanted us to come to them.

1 When one intends to enter the first gut, or narrow passage in the straits, it is proper to coast within a league of Cape Possession; then to steer S. by W, taking care not to fall off too much to the south, on account of the rocks which extend N. N. E. and S. S. W. from Cape Orange, more than three leagues.

2 The first gut lies N. N. E. and S. S. W. and is not above three leagues long. Its breadth varies from a league, to a league and a half. I have already given notice of the ledge of rocks at Cape Orange. At coming out of the first gut, you meet with two lesser rocks, extended on each of its extremities. They both project to S. W. There is a great depth of water in the gut.

According to the report of the Spaniards, the nation which inhabits this part of Terra del Fuego, practices none of the cruel customs of most other savages. They behaved with great humanity to the crew of the ship *la Concepcion*, which was lost on their coast in 1765. They assisted them in saving part of her cargo; and in erecting sheds, to shelter them against bad weather. The Spaniards built a bark there of the wreck of their ships, in which they went to Buenos Ayres. The *xebek el Andaluz* was going to bring missionaries to these Indians, when we left Rio de la Plata. Lumps of wax, being part of the cargo of the above ship, have been carried by the force of currents to the coast of the Malouines, where they were found in 1766. I have already observed, that we were gone through the first gut at noon; after that we made sail. The wind was veered to S. and the tide continued to carry us to the westward. At three o'clock they both failed us; and we anchored in Boucault's-bay, in eighteen fathom, oozy bottom.

Interview with the Patagonians.

As soon as we were at anchor, I hoisted out one of my boats, and one belonging to the *Etoile*. We embarked in them, being about ten officers, each armed with our muskets; and we landed at the bottom of the bay, with the precaution of ordering our boats to be kept a-float, and the crew to remain in them. We had hardly set foot on shore, but we saw six Americans come to us on horseback, in full gallop. They alighted about fifty yards from us; and immediately ran towards us, crying, *shawa*. When they had joined us, they stretched out their arms towards us, and laid them upon ours. They then embraced us, and shook hands with us, crying continually, *Shawa, shawa*, which we repeated with them. These good people seemed very much rejoiced at our arrival. Two of them, who trembled as they came towards us, had their fears very soon removed. After many reciprocal caresses, we sent for some cakes and some bread from our boats; which we distributed amongst them, and which they devoured with avidity. Their numbers increased every moment; they were soon come to thirty, among whom were some young people, and a child of eight or ten years old. They all came to us with entire confidence; and caressed us all, as the first had done. They did not seem surprised to see us; and by imitating the report of muskets with their voice, they shewed that they were acquainted with these arms. They appeared attentive to do what might give us pleasure. M. de Commerçon, and some of our gentlemen, were busy in picking up plants: several Patagonians immediately began to search for them too, and brought what species they saw us take up. One of them seeing the *chevalier du Bouchage* occupied in this manner, came to shew him his eye, which was very visibly affected; and asked him by signs, to point out to him some simple, by which he could be cured. This shews that they have an idea, and make use of that sort of medicine, which requires the knowledge of simples, and applies them for the cure of mankind. This was the medicine of Machaon, who was physician to the gods; and, I believe, that many Machaons might be found among the Indians in Canada,

We exchanged some trifles, valuable in their eyes, against skins of *guanaco's* and *vicunnas*. They asked us by signs for tobacco; and they were likewise very fond of any thing red: as soon as they saw something of that colour upon us, they came to stroke it with their hands, and seemed very desirous of it. At every present which we gave them, and at every mark of fondness, they repeated their *shawa*, and cried so that it almost stunned us. We gave them some brandy; giving each of them only a small draught: as soon as they had swallowed it, they beat with their hands on their throat, and by blowing with their mouths, uttered a tremulous inarticulate sound, which terminated in a quick motion of the lips. They all made the same droll ceremony, which was a very strange sight to us.

However, it grew late, and was time to return on board. As soon as they saw that we were preparing for that purpose, they seemed sorry; they made signs for us to wait, because some

more of their people were coming. We made signs that we would return the next day, and that we would bring them what they desired; they seemed as if they would have liked our passing the night on shore much better. When they saw that we were going they accompanied us to the seashore; a Patagonian sung during this march. Some of them went into the water up to their knees, in order to follow us further. When we were come to our boats, we were obliged to look after every thing; for they got hold of all that was within their reach. One of them had taken a sickle, but on its being perceived, he returned it without resistance. Before we were got to any distance, we perceived their troops encrease, by the arrival of others, who came in full gallop. We did not fail, as we left them, to shout *shawa* so loud that the whole coast resounded with it.

Description of these Americans.

These Americans are the same with those seen by the Etoile in 1765. One of our sailors, who was then on board that vessel, now knew one of these Americans again, having seen him in the first voyage. They have a fine shape; among those whom we saw, none was below five feet five or six inches, and none above five feet nine or ten inches; [1] the crew of the Etoile had even seen several in the preceding voyage, six feet (or six feet, 4,728 inches English) high. What makes them appear gigantic, are their prodigious broad shoulders, the size of their heads, and the thickness of all their limbs. They are robust and well fed: their nerves are braced, and their muscles are strong and sufficiently hard; they are men left entirely to nature, and supplied with food abounding in nutritive juices, by which means they are come to the full growth they are capable of: their figure is not coarse or disagreeable; on the contrary, many of them are handsome: their face is round, and somewhat flattish; their eyes very fiery; their teeth vastly white, and would only be somewhat too great at Paris; they have long black hair tied up on the top of their heads; I have seen some of them with long but thin whiskers. Their colour is bronzed, as it is in all the Americans, without exception, both in those who inhabit the torrid zone, and those who are born in the temperate and in the frigid ones. Some of them had their cheeks painted red: their language seemed very delicate, and nothing gave us reason to fear any ferocity in them. We have not seen their women; perhaps they were about to come to us; for the men always desired that we should stay, and they had sent one of their people towards a great fire, near which their camp seemed to be, about a league from us; and they shewed us that somebody would come from thence.

The dress of these Patagonians is very nearly the same with that of the Indians of Rio de la Plata; they have merely a piece of leather which covers their natural parts, and a great cloak of *guanaco* or *sorillos* skins, which is fastened round the body with a girdle; this cloak hangs down to their heels, and they generally suffer that part which is intended to cover the shoulders to fall back, so that, notwithstanding the rigour of the climate, they are almost always naked from the girdle upwards. Habit has certainly made them insensible to cold; for though we were here in summer, Reaumur's thermometer was only one day risen to ten degrees above the freezing point. These men have a kind of half boots, of horse-leather, open behind, and two or three of them had on the thigh a copper ring, about two inches broad. Some of my officers likewise observed, that two of the youngest among them had such beads as are employed for making necklaces.

1 This is to be understood in French measure, in which the French foot exceeds the English by ,788 of an inch; accordingly, in French measure, 5 feet 6 inches = 5 feet, 10.334, inches English; and French 5 feet 10 inches are=6 feet, 2,5704, inches English. F.

The only arms which we observed among them, are, two round pebbles, fastened to the two ends of a twisted gut, like those which are made use of in all this part of America, and which we have described above. They had likewise little iron knives, of which the blade was between an inch and an inch and a half broad.

These knives, which were of an English manufactory, were certainly given them by Mr. Byron. Their horses, which are little and very lean, were bridled and saddled in the same manner as those belonging to the inhabitants of Rio de la Plata.

One of the Patagonians had at his saddle, gilt nails; wooden stirrups, covered with plates of copper; a bridle of twisted leather, and a whole Spanish harness. The principal food of the Patagonians seems to be the marrow and flesh of *guanaco*s and *vicunna*s; many of them had quarters of this flesh fastened on their horses, and we have seen them eat pieces of it quite raw. They had likewise little nasty dogs with them, which, like their horses, drink sea-water, it being a very scarce thing to get fresh water on this coast, and even in the country. None of them had any apparent superiority over the rest; nor did they shew any kind of esteem for two or three old men who were in their troop. It is remarkable that several of them pronounced the Spanish words *manana*, *muchacha*, *bueno*, *chico*, *capitan*. I believe this nation leads the life of Tartars. Besides rambling through the immense plains of South America, men, women and children being constantly on horseback, pursuing the game, or the wild beasts, with which those plains abound, dressing and covering themselves with skins, they bear probably yet this resemblance with the Tartars, that they pillage the caravans of travellers. I shall conclude this article by adding, that we have since found a nation in the South Pacific Ocean which is taller than the Patagonians.

Quality of the soil in this part of America.

The soil in the place we landed at is very dry, and in that particular bears great resemblance with that of the Malouines; the botanists have likewise found almost all the same plants in both places. The sea shore was surrounded with the same sea-weeds, and covered with the same shells. Here are no woods, But only some shrubs. When we had anchored in Boucault's bay, the

Remarks on the tides in these parts.

tide was going to set in against us, and whilst we were on shore, we observed that the water rose, and accordingly the flood sets in to eastward. This observation we have been able to make with certainty several times during this navigation, and it had struck me already in my first voyage. At half past nine in the evening, the ebb set to westward. We sounded at high water, [1] and found the depth was encreased to twenty-one fathoms, from eighteen, which we had when we cast anchor.

Second time of anchoring in Boucault's bay.

On the 9th, at half an hour past four in the morning, the wind being N. W. we set all our sails in order to stem the tide, steering S. W. by W. we advanced only one league; the wind veering to S. W. and blowing very fresh, we anchored again in nineteen fathom, bottom of sand, ooze, and rotten shells. The bad weather continued throughout this day and the next. The short distance we were advanced had brought us further from the shore, and during these two days, there was not one favourable instant for sending out a boat, for which, the Patagonians were certainly as sorry as ourselves.

1 A mer étale.

We saw the whole troop of them collected at the place where we landed before, and we thought we perceived with our perspective glasses, that they had erected some huts there. However, I apprehend that their head quarters were more distant, for men on horseback were constantly going and coming.

We were very sorry that we could not bring them what we had promised; they might be satisfied at a small expence.

The difference of the depth at the different times of tide, was only one fathom here. On the 10th, from an observation of the moon's distance from Regulus, M. Verron calculated our west longitude in this anchoring place, at $73^{\circ} 26' 15''$, and that of the easterly entrance of the second gut, at $73^{\circ} 34' 30''$. Reaumur's thermometer fell from 9° to 8° and 7° .

Loss of an anchor.

The 11th, at half an hour after midnight, the wind veering to N. E. and the tide setting to westward an hour before, I made signal for weighing. Our efforts to that purpose were fruitless, though we had got the winding-tackle upon the cable. At two in the morning, the cable parted between the bits and the hawse, and so we lost our anchor. We set all our sails, and soon had the tide against us, which we were hardly able to stem with a light breeze at N. W. though the tide in the second gut is not near so strong as in the first. At noon the ebb came to our assistance, and

Passing the second gut.

we passed the second gut, [1] the wind having been variable till three in the afternoon, when it blew very fresh from S. S. W. and S. S. E. with rain and violent squalls [2]

We anchor near the isle of Elizabeth.

In two boards we came to the anchoring-place, to the northward of the isle of Elizabeth, where we anchored, two miles off shore, in seven fathom, grey sand with gravel and rotten shells. The Etoile anchored a quarter of a league more to the S. E. than we did, and had seventeen fathom of water.

We were obliged to stay here the 11th and 12th, on account of the contrary wind, which was attended with violent squalls, rain, and hail.

1 The distance between the W. point or end of the first gut, and the entrance of the second, is about six or seven leagues, and the breadth of the straits there is likewise about seven leagues. The second gut lies N. E. by E. and S. W. by W. it is about a league and a half broad, and three or four long.

2 In passing the second gut, it is necessary to keep along the coast of Patagonia, because, when you come out of the gut, the tides run southward, and you must be careful to avoid a low point, projecting below the head-land of St George's isle, and though this apparent cape is high and steep, the low land advances far to W. N. W.

On the 12th in the afternoon, we hoisted out a boat, in order to go on shore on the isle of Elizabeth. [1] We landed in the N. E. part of the island. Its coasts are high and steep, except at the S. W. and S. E. points, where the shore is low. However, one may land in every part of it, as there is always a small slip of flat land under the high perpendicular shores. The soil of the isle

Description of this isle.

is very dry; we found no other water than that of a little pool in the S. W. part of the isle, but it was very brackish. We likewise saw several dried marshes, where the earth is in some places covered with a thin crust of salt. We found some bustards, but they were in small number, and so very shy, that we were never able to come near enough to shoot them: they were however sitting on their eggs. It appears that the savages come upon this island. We found a dead dog, some marks of fire places, and the remnants of shells, the fish of which had been feasted upon. There is no wood on it, and a small sort of heath is the only thing that may be used as fuel. We had already collected a quantity of it, fearing to be obliged to pass the night on this isle, where the bad weather kept us till nine of the clock in the evening: we should have been both ill lodged and ill fed on it.

1 The isle of Elizabeth † lies N. N. E. and S. S. W. with the west point of the second gut, on the Patagonian side. The isles of St. Barthelemi (St. Bartholomew) and of Lions likewise, lie N. N. E. and S. S. W. between them and the west point of the second gut on St. George's island.

† The French call it Sainte Elizabeth. F.

CHAP. IX.

*The run from the isle of Elizabeth, through the straits of Magalhaens.
Nautical details on this navigation.*

Difficulties of the navigation along the isle of Elizabeth.

WE were now going to enter the woody part of the straits of Magalhaens; and the first difficult steps were already made.

It was not till the 13th in the afternoon, the wind being N. W. that we weighed, notwithstanding the force with which it blew, and made sail in the channel, which separates the isle of Elizabeth from the isles of St. Barthelemi and of Lions. [1] We were forced to carry sail; though there were almost continually very violent squalls coming off the high land of Elizabeth island; a-long which we were obliged to sail, in order to avoid the breakers, which extend around the other two isles. [2]

The tide in this channel sets to the southward, and seemed very strong to us. We came near the shore of the main-land, below Cape Noir; here the coast begins to be covered with woods; and its appearance from hence is very pleasant. It runs southward; and the tides here are not so strong as in the above place.

It blew very fresh and squally, till six o'clock in the evening; when it became calm and moderate. We sailed along the coast, at about a league's distance, the weather being clear and serene; flattering ourselves to be able to double Cape Round during night; and then to have, in case of bad weather, Port Famine to leeward.

1 The isles of St. Barthelemi and of Lions, are connected together by a shoal. There are likewise two shoals; one S. S. W. of the isle of Lions, and the other W. N. W. of St. Barthelemi, one or two leagues distant; so that these three shoals, and the two isles form a chain; between which, to E. S. E. and the isle of St. Elizabeth to W. N. W. is the channel through which you advance into the straits. This channel runs N.N.E. and S.S.W.

I do not think it practicable to sail on the south side of the isles of St. Barthelemi and of Lions, nor between the isle of Elizabeth and the main land.

2 From the end of the second gut, to the N. E. point of the isle of Elizabeth, the distance is about four leagues. Elizabeth island extends S. S. W. and N. N. E, for the length of about three leagues and a half. It is necessary to keep this shore on board, in passing through the above channel.

From the S. W. point of Elizabeth island, to Cape Noir, the distance is not above a league. †

† This Cape Noir is not mentioned in M. de B's. map; but should be carefully distinguished from *Cape Noir*, or *Cabo Negro*, seen by lord Anson upon Terra del Fuego, in about 54° S. lat. F.

Bad weather and disagreeable night.

But these projects were frustrated; for, at half an hour after mid-night, the wind shifted all at once to S. W. the coast became foggy; the continual and violent squalls brought rain and hail with them; and, in short, the weather soon became as foul, as it had been fair the moment before. Such is the nature of this climate; the changes of weather are so sudden and frequent, that it is impossible to foresee their quick and dangerous revolutions.

Our main-sail having been split, when in the brails, we were forced to ply to windward, under our fore-sail, main-stay-sail, and close-reefed top-sails, endeavouring to double Point St. Anne, and to take shelter in Port Famine. This required our gaining a league to windward; which we could never effect. As our tacks were short, and being obliged to wear, a strong current was carrying us into a great inlet in Terra del Fuego; we lost three leagues in nine hours on this manœuvre, and were obliged to go along the coast in search of anchorage to leeward. We ranged along it, and kept sounding continually; and, about eleven o'clock in the morning, we

We anchor in bay Duclos.

anchored a mile off shore, in eight fathom and a half, oozy sand, in a bay, which I named Bay Duclos; [1] from the name of M. Duclos Guyot, a captain of a fire-ship, who was the next in command after me on this voyage; and whose knowledge and experience have been of very great use to me.

Description of this bay.

This bay is open to the eastward, and its depth is very inconsiderable. Its northern point projects more into the sea, than the southern one; and they are about a league distant from each other. The bottom is very good in the whole bay; and there is every where six or eight fathom of water, within a cable's length from the shore. This is an excellent anchorage; because the westerly winds, which prevail here, blow over the coast, which is very high in this part. Two little rivers discharge themselves into the bay; the water is brackish at their mouth, but very good five hundred yards above it. A kind of meadow lies along the landing, place, which is sandy. The woods rise behind it in form of an amphitheatre; but the whole country seems entirely without animals. We have gone through a great track of it, without finding more than two or three snipes, some teals, ducks, and bustards in very small number: we have likewise perceived some *perrokeets*; [2] the latter are not afraid of the cold weather.

At the mouth of the most southerly river, we found seven huts, made of branches of trees, twisted together, in form of an oven; they appeared to have been lately built, and were full of calcined shells, muscles, and limpets.

1 From Cape Noir the coast runs S. S. E. to the northern point of Bay Duclos, which is about seven leagues distant from it.

Opposite Bay Duclos, there is a prodigious inlet in Terra del Fuego; which I suspect to be a channel, disemboguing eastward of Cape Horn. Cape Monmouth forms the north point of it.

2 *Perruches*, probably *sea parrots*, or auks. F.

New observations on the tides.

We went up a considerable way in this river, and saw some marks of men, Whilst we were on shore, the tide rose one foot, and the flood accordingly came from east, contrary to the observations we had made after doubling Cape Virgin; having ever since seen the water rise when the tide went out of the straits. But it seems to me, after several observations, that having passed the guts, or narrows, the tides cease to be regular in all that part of the straits, which runs north and south.

The number of channels, which divide Terra del Fuego in this part, seem necessarily to cause a great irregularity in the motion of the water. During the two days which we passed in this anchoring-place, the thermometer varied from eight to five degrees. On the 15th at noon, we observed $53^{\circ} 20'$ of latitude there; and that day we employed our people in cutting wood; the calm not permitting us then to set sail.

Nautical observations.

Towards night the clouds seemed to go to westward and announced us a favourable wind. We hove a-peek upon our anchor; and, actually, on the 16th, at four o'clock in the morning, the breeze blowing from the point whence we expected it, we set sail. The sky, indeed, was cloudy; and, as is usual in these parts, the east and north-east winds, accompanied with fog and rain. We passed Point St. Anne [1] and Cape Round. [2] The former is a table-land, of a middling height; and covers a deep bay, which is both safe and convenient for anchoring. It is that bay, which, on account of the unhappy fate of the colony of Philippeville, established by the presumptuous Sarmiento, has got the name of *Port Famine*. Cape Round is a high land, remarkable on account of the figure which its name expresses; the shores, in all this tract, are woody and steep; those of Terra del Fuego appear cut through by several straits. Their aspect is horrible; the mountains there are covered with a blueish snow, as old as the creation. Between Cape Round and Cape Forward there are four bays, in which a vessel may anchor.

Description of a singular cape.

Two of these are separated from each other by a cape; the singularity of which fixed our attention, and deserves a particular description. This cape rises upwards of a hundred and fifty feet above the level of the sea; and consists entirely of horizontal strata, of petrified shells. I have been in a boat to take the soundings at the foot of this monument, which marks the great changes our globe has undergone; and I have not been able to reach the bottom, with a line of a hundred fathom.

1 The distance from Bay Duclos to Point St. Anne, is about five leagues; and the bearing being S. E. by S. there is nearly the same distance from Point St. Anne to Cape Round, which bear respectively N. N. E. and S. S. W.

2 From the second gut to Cape Round, the breadth of the straits varies from seven to five leagues; they grow narrow at Cape Round, where their breadth does not exceed three leagues.

Description of Cape Forward.

The wind brought us to within a league and a half of Cape Forward; we were then becalmed for two hours together. I profited of this time, to go in my pinnace, near Cape Forward, to take soundings and bearings. This cape is the most southerly point of America, and of all the known continents. From good observations we have determined its south lat. to be $54^{\circ} 5' 45''$. It shews a surface with two hillocks, extending about three quarters of a league; the eastern hillock being higher than the western one. The sea is almost unfathomable below the cape; however, between the two hillocks or heads, one might anchor in a little bay provided with a pretty considerable rivulet, in 15 fathom, sand and gravel; but this anchorage being dangerous in a southerly wind, ought only to serve in a case of necessity. The whole cape is a perpendicular rock, whose elevated summit is covered with snow. However, some trees grow on it; the roots of which are fixed in the crevices, and are supplied with perpetual humidity. We landed below the cape at a little rock, where we found it difficult to get room for four persons to stand on. On this point, which terminates or begins, a vast continent, we hoisted the colours of our boat; and these wild rocks resounded, for the first time, with the repeated shouts of *vive le Roi*. From hence we set out for Cape Holland, bearing W. 4° N. and accordingly the coast begins here to run northward again.

Anchoring in the Bay Française.

We returned on board at six o'clock in the evening; and soon after the wind veering to S. W. I went in search of the harbour, which M. de Gennes. named the French Bay. (*Baie Française*) At half an hour past eight o'clock we anchored there in ten fathom, sandy and gravelly bottom; between the two points of the bay, of which the one bore N. E. $\frac{1}{4}$ E. and the other S. $\frac{1}{4}$ W. and the little island in the middle, N.E. As we wanted to take in water and wood for our course across the Pacific Ocean, and the remaining part of the straits was unknown to me; being in my first voyage, come no further than near Bay Française, I resolved to take in those necessaries here; especially as M. de Gennes represents it very safe and convenient for this purpose: accordingly that very evening we hoisted all our boats out. During night the wind veered all round the compass; blowing in very violent squalls; the sea grew high, and broke round us upon a sand, which seemed to ly all round the bottom of the bay. The frequent turns, which the changes of the wind caused our ship to make round her anchor, gave us room to fear that the cable might be foul of it; and we passed the night under continual apprehensions.

The Etoile lying more towards the offing than we did, was not so much molested. At half past two in the morning, I sent the little boat to sound the mouth of the river, to which M. de Gennes has given his name. It was low water; and the boat did not get into the river, without running aground upon a sand at its mouth; at the same time they found, that our large boats could only get up at high-water; and thus could hardly make above one trip a day. This difficulty of watering, together with the anchorage not appearing safe to me, made me resolve to bring the ships into a little bay, a league to the eastward of this. I had there, without difficulty, in 1765, taken a loading of wood for the Malouines, and the crew of the ship had given it my name. I wanted previously to go and be sure, whether the crews of both ships could conveniently water there. I found, that besides the rivulet, which falls into the bottom of the bay itself; and which might be adapted for the daily use, and for washing, the two adjoining bays had each a rivulet proper to furnish us easily with as much water as we wanted; and without having above half a mile to fetch it.

In consequence of this, we sailed on the 17th, at two o'clock in the afternoon, with our fore and mizen-top-sails. We passed without the little isle, in Bay Françoise; and, afterwards, we entered into a very narrow pass, in which there is deep water, between the north point of this bay and a high island, about half a quarter of a league long.

This pass leads to the entrance of Bougainville's bay; which is, moreover, covered by two other little isles; the most considerable of which, has deserved the name of Isle of the Observatory, (*Islet de l'Observatoire*)[1].

The bay is two hundred toises [2] long, and fifty deep; high mountains surround it, and secure it against all winds; and the sea there is always as smooth as in a bason.

We anchor in Bay Bougainville.

We anchored at three o'clock in the entrance of the bay, in twenty eight fathom of water; and we immediately sent our tow-lines on shore, in order to warp into the bottom of the bay. The *Etoile* having let go her off anchor in too great a depth of water, drove upon the Isle of the Observatory; and before she could haul-tight the warps which she had sent a-shore, to steady her, her stern came within a few feet of this little isle, though she had still thirty fathom of water. The N. E. side of this isle is not so deep. We spent the rest of the day in mooring, with the head towards the offing, having one anchor a-head in twenty-three fathom oozy sand; a kedge-anchor a-stern, almost close to the shore; and two hawsers fastened to the trees on the larboard-side; and two on board the *Etoile*, which was moored as we were. Near the rivulet we found two huts, made of branches, which seemed to have been abandoned long ago. In 1765 I got one of bark constructed there, in which I left some presents for the Indians, which chance might conduct thither; and at the top of it I placed a white flag: we found the hut destroyed; the flag, with the presents, being carried off.

On the 18th, in the morning, I established a camp on shore, in order to guard the workmen, and the various effects which we landed; we likewise sent all our casks on shore, to refit them and prepare them with sulphur; we made pools of water for the use of those who were employed in washing, and hauled our long-boat a-shore, because she wanted a repair. We passed the remainder of December in this bay, where we provided ourselves with wood; and even with planks at our ease. Every thing facilitated this work: the roads were ready made through the woods; and there were more trees cut down than we wanted, which was the work of the *Eagle's* crew in 1765, Here we likewise heeled ship, boot-topped and mounted eighteen guns. The *Etoile* had the good fortune to stop her leak; which, since her departure from Montevideo, was grown as considerable as before her repair at the Encenada. By bringing her by the stern, and taking off part of the sheathing forward, it appeared that the water entered at the scarfing of her stem. This was remedied; and it was during the whole voyage, a great comfort to the crew of that vessel, who were almost worn out by the continual exercise of pumping.

Observations astronomical and meteorological.

M. Verron, in the first days, brought his instruments upon the Isle of the Observatory; but past most of his nights there in vain. The sky of this country, which is very bad for astronomers, prevented his making any observation for the longitude; he could only determine by three observations with the quadrant, that the south latitude of the little isle is $53^{\circ} 50' 25''$.

1 From Cape Round, to the Isle of the Observatory, the distance is about four leagues; and the coast runs W. S. W. In this distance there are three good anchoring-places.

2 A French *toise* is six feet Paris measure. F.

He has likewise determined the flowing of the tide in the entrance to the bay, at 00^h 59'. The water never rose here above ten feet. During our stay here the thermometer was generally between 8° and 9°, it fell once to 5° and the highest it ever rose to was 12^o. The sun then appeared without clouds, and its rays, which are but little known here, melted part of the snow that lay on the mountains of the continent. M. de Commerçon, accompanied by the prince of Nassau, profited of such days for botanizing. He had obstacles of every kind to surmount, yet this wild soil had the merit of being new to him, and the straits of Magalhaens have filled his

Description of this part of the straits.

herbals with a great number of unknown and interesting plants. We were not so successful in hunting and fishing, by which we never got any thing, and the only quadruped we saw here, is a fox, almost like an European one, which was killed amidst the workmen.

We likewise made several attempts to survey the neighbouring coasts of the continent, and of Terra del Fuego; the first was fruitless. I set out on the 22d at three o'clock in the morning with Mess. de Bournand and du Bouchage, intending to go as far as Cape Holland, and to visit the harbours that might be found on that part of the coast. When we set out it was calm and very fine weather. An hour afterwards, a light breeze at N. W. sprung up, but immediately after, the wind shifted to S. W. and blew very fresh. We strove against it for three hours together, under the lee of the shore, and with some difficulty got into the mouth of a little river, which falls into a sandy creek, covered by the eastern head of Cape Forward. We put in here, hoping that the foul weather would not last long. This hope served only to wet us thoroughly by the rain, and to make us quite chilled with cold. We made us a hut of branches of trees in the woods, in order to pass the night there a little more under shelter. These huts serve as palaces to the natives of these climates; but we had not yet learnt their custom of living in them. The cold and wet drove us from our lodging, and we were obliged to have recourse to a great fire, which we took care to keep up, endeavouring to shelter us against the rain, by spreading the sail over us which belonged to our little boat. The night was dreadful, wind and rain encreased, and we could do nothing else but return at break of day. We arrived on board our frigate at eight of the clock in the morning; happy to have been able to take shelter there; for the weather became so much worse soon after, that we could not have thought of coming back again. During two days there was a real tempest, and the mountains were all covered with snow again. However, this was the very middle of summer, and the sun was near eighteen hours above the horizon.

Discovery of several ports on Terra del Fuego.

Some days after I undertook a new course, more successfully, for visiting part of Terra del Fuego, and to look for a port there, opposite Cape Forward; I then intended to cross the straits to Cape Holland, and to view the coasts from thence till we came to Bay François, which was what we could not do on our first attempt. I armed the long boat of the Boudeuse, and the Etoile's barge, with swivel guns and muskets, and on the 27th, at four o'clock in the morning, I went from on board with Messrs. de Bournand, d'Oraison, and the prince of Nassau. We set sail at the west point of Bay François, in order to cross the straits to Terra del Fuego, where we landed about ten o'clock, at the mouth of a little river, in a sandy creek, which is inconvenient even for boats. However, in a case of necessity, the boats might go up the river at high water, where they would find shelter. We dined on its banks, in a pleasant wood, under the shade of which were several huts of the savages. From this station, the western point of Bay François bore N. W. by W. $\frac{1}{2}$ W. and we reckoned ourselves five leagues distant from it.

After dinner we proceeded by rowing along the coast of Terra del Fuego; it did not blow much from the westward, but there was a hollow sea. We crossed a great inlet, of which we could not

see the end. Its entrance, which is about two leagues wide, is barred in the middle by a very high island. The great number of whales which we saw in this part, and the great rolling sea, inclined us to imagine that this might well be a strait leading into the sea pretty near Cape Horn. Being almost come to the other side, we saw several fires appear, and become extinct;

Meeting with savages.

afterwards they remained lighted, and we distinguished some savages upon the low point of a bay, where I intended to touch. We went immediately to their fires, and I knew again the same troop of savages which I had already seen on my first voyage in the straits. We then called them *Pécherais*, because that was the first word which they pronounced when they came to us, and which they repeated to us incessantly, as the Patagonians did their *shawa*. For this reason we gave them that name again this time. I shall hereafter have an opportunity to describe these inhabitants of the wooded parts of the strait. The day being upon the decline, we could not now stay long with them. They were in number about forty, men, women, and children; and they had ten or a dozen canoes in a neighbouring creek. We left them in order to cross the bay, and enter into an inlet, which, the night coming on, prevented us from executing. We passed the night on the banks of a pretty considerable river, where we made a great fire, and where the sails of our boats, which were pretty large, served us as tents; the weather was very fine, although a little cold.

Bay and port of Beaubassin.

Its description.

The next morning we saw that this inlet was actually a port, and we took the soundings of it, and of the bay. The anchorage is very good in the bay, from forty to twelve fathoms, bottom of sand, small gravel and shells. It shelters you against all dangerous winds. Its easterly point may be known by a very large cape, which we called the *Dome*. To the westward is a little isle, between which and the shore, no ship can go out of the bay; you come into the port by a very narrow pass, and in it you find ten, eight, six, five, and four fathoms, oozy bottom you must keep in the middle, or rather come nearer the east side, where the greatest depth is. The beauty of this anchoring place determined us to give it the name of bay and port of *Beaubassin*. If a ship waits for a fair wind, she need anchor only in the bay. If she wants to wood and water, or even careen, no properer place for these operations can be thought of than the port of *Beaubassin*.

I left here the chevalier de Bournand, who commanded the long boat, in order to take down as minutely as possible all the information relative to this important place, and then to return to the ships. For my part, I went on board the *Etoile's* barge with Mr. Landais, one of the officers of that store-ship, who commanded her, and I continued my survey. We proceeded to the westward, and first viewed an island, round which we went, and found that a ship may anchor all round it, in twenty-five, twenty-one, and eighteen fathoms, sand and small gravel. On this isle there were some savages fishing. As we went along the coast, we reached a bay before sun

Bay de la Cormorandiere.

set, which affords excellent anchorage for three or four ships. I named it bay *de la Cormorandiere*, on account of an apparent rock, which is about a mile to E. S. E. of it. At the entrance of the bay we had fifteen fathoms of water, and in the anchoring place eight or nine; here we passed the night.

On the 29th at day break we left bay *de la Cormorandiere*, and went to the westward by the assistance of a very strong tide. We passed between two isles of unequal size, which I named

the two sisters (*les deux Soeurs*). They bear N. N. E. and S. S. W. with the middle of Cape Forward, from which they are about three leagues distant. A little farther we gave the name of Sugar-loaf (*Pain de sucre*) to a mountain of this shape, which is very easy to be distinguished, and bears N. N. E. and S. S. W. with the southern point of the same cape; and about five leagues from the *Cormorandiere* we discovered a fine bay, with an amazing fine port at the bottom of

Bay and port of the cascade.

it; a remarkable water-fall in the interior part of the port, determined me to call them *Bay and Port of the Cascade*. The middle of this bay bears N. E. and S. W. with Cape Forward, The safe and convenient anchorage, and the facility of taking in wood and water, shew that there is nothing wanting in it.

Description of the country.

The cascade is formed by the waters of a little river, which runs between several high mountains; and its fall measures about fifty or sixty toises, (i. e. 300 or 360 feet French measure): I have gone to the top of it. The land is here and there covered with thickets, and has some little plains of a short spungy moss; I have here been in search of vestiges of men, but found none, for the savages of this part seldom or never quit the sea-shores, where they get their subsistence. Upon the whole, all that part of Terra del Fuego, reckoning from opposite Elizabeth island, seems to me, to be a mere cluster of great, unequal, high and mountainous islands, whose tops are covered with eternal snow. I make no doubt but there are many channels between them into the sea. The trees and the plants are the same here as on the coast of Patagonia; and, the trees excepted, the country much resembles the Malouines.

Usefulness of the three ports before described.

I here add a particular chart which I have made of this interesting part of the coast of Terra del Fuego.

Till now, no anchoring place was known on it, and ships were careful to avoid it. The discovery of the three ports which I have just described on it, will facilitate the navigation of this part of the straits of Magalhaens. Cape Forward has always been a point very much dreaded by navigators. It happens but too frequently, that a contrary and boisterous wind prevents the doubling of it, and has obliged many to put back to Bay Famine. Now, even the prevailing winds may be turned to account, by keeping the shore of Terra del Fuego on board, and putting into one of the above-mentioned anchoring places, which can be done almost at any time, by plying in a channel where there is never a high sea for ships. From thence all the boards are advantageous, and if one takes care to make the best of the tides, which here begin to have more effect again, it will no longer be difficult to get to Port Galant.

We passed a very disagreeable night in Port Cascade. It was very cold, and rained without intermission. The rain continued throughout almost the whole 30th day of December. At five o'clock in the morning we went out of the port, and sailed across the strait with a high wind and a great sea, considering the little vessel we were in. We approached the coast nearly at an equal distance between Cape Holland and Cape Forward. It was not now in question to view the coast, being happy enough to run along it before the wind, and being very attentive to the violent squalls, which forced us to have the haliards and sheets always in hand. A false movement of the helm was even very near oversetting the boat, as we were crossing Bay Françoise. At last I arrived on board the frigate, about ten o'clock in the morning. During my

absence, M. Duclos Guyot had taken on board what we had on shore, and made every thing ready for weighing; accordingly, we began to unmoor in the afternoon.

Departure from Bougainville Bay.

The 31st of December at four of the clock in the morning; we weighed, and at six o'clock we left the bay, being towed by our boats. It was calm; at seven a light breeze sprung up at N. E. which became more fresh in the day; the weather was clear till noon, when it became foggy and rainy. At half an hour past eleven, being in the middle of the strait, [1] we discovered, and set the Cascade bearing S. E. the Sugar Loaf S. E. by E. $\frac{1}{2}$ E. Cape Forward [2] E. by N. Cape Holland [3] W. N. W, $\frac{1}{2}$ W. From noon till six in the evening we doubled Cape Holland. It blew a light breeze, which abating in the evening, and the sky being covered, I resolved to anchor in the road of Port Galant, where we anchored in sixteen fathoms, coarse gravel, sand and small

Anchorage in Fortescue Bay.

coral; Cape Galant bearing S. W. 3° W. [4] We had soon reason to congratulate ourselves on being in safety; for, during the night, it rained continually, and blew hard at S. W.

1768. January.

We began the year 1768 in this bay, called Bay Fortescue, at the bottom of which is Port Galant. [5]

1 A mi-canal.

2 From the isle of the Observatory, Cape Forward is about six leagues distant, and the coast runs nearly W. S. W. The strait is there between three and four leagues broad.

3 In the space of about five leagues, which are between Cape Forward and Cape Holland, there are two other capes, and three creeks, of little depth. I know of no anchorage there. The breadth of the straits varies from three to four leagues.

4 Cape Holland and Cape Galant bear among themselves E. 2° S. and W, 2° N. and the distance is about eight leagues. Between these two capes there is one, less projecting, called Cape Coventry. They likewise place several bays there, of which we have only seen Bay Verte, or Green Bay, or Bay De Cordes, which has been visited by land. It is great and deep, but there seem to be several shallows in it.

5 Bay Fortescue is about two miles broad from one point to the other, and not quite so deep, from its entrance, till to a peninsular, which, coming from the west-side of the bay, extends E. S. E. and covers a port, well sheltered from all the winds. This is Port Galant, which is a mile deep towards the W. N. W. Its breadth is from four hundred to five hundred yards. There is a river at the bottom of the port, and two more on the N. E. side. In the middle of the port there is four or five fathoms, of water, bottom of ooze and shells.

The plan of the bay and port is very exact in M. de Gennes. We have had too much leisure to confirm it, having been confined there for three weeks together, by such weather as one cannot

Account of the obstacles we met with.

form any idea of, from the worst winter at Paris. It is but just to let the reader partake in some measure of the disagreeable circumstances on these unlucky days, by giving the sketch of our stay in this place.

My first care was to send out people to view the coast as far as Bay Elizabeth, and the isles with which the straits of Magalhaens are full in this part. From, our anchoring-place we perceived two of these isles, which Narborough [1] calls Charles and Monmouth. Those which are farther off he calls the Royal isles, and the westernmost of all, he names Rupert Island. The west winds preventing us from making sail, we moored with a stream-anchor. The rain did not keep our

Vestiges we found of the passage of English ships.

people from going on shore, where they found vestiges of the passage and touching of English ships; viz. some wood, lately sawed and cut down; some spice-laurel trees, [2] lately stripped of their bark; a label of wood, such as in marine arsenals, are generally put upon pieces of cloth, &c. on which we very distinctly read the words, *Chatham, March 1766*; they likewise found upon several trees, initial letters and names, with the date of 1767.

Astronomical and nautical observations.

M. Verron, who had got all his instruments carried upon the peninsula that forms the harbour, made an observation there at noon, with a quadrant; and found $53^{\circ} 40' 41''$ S. lat. This observation, and the bearings of Cape Holland, taken from hence; and those of the same cape, taken the 16th of December, upon the point from Cape Forward, determine the distance of Port Galant to Cape Forward, to twelve leagues. Here he likewise observed, by the azimuth-compass, the declination of the needle $22^{\circ} 30' 32''$ N. E. and its inclination from the elevation of the pole $11^{\circ} 11'$. These are the only observations he was able to make, during almost a whole month; the nights being as gloomy as the days. On the third of January, there was a fine opportunity of determining the longitude of this bay; by means of an eclipse of the moon, which began here at 10 hours, 30' in the evening; but the rain, which had been continual in the day-time, lasted likewise through the whole night.

The 4th and 5th the weather was intolerable; we had rain, snow, a sharp cold air, and a storm; it was such weather as the Psalmist describes, saying, *Nix, grando, glacies, spiritus procellarum*. On the third I had sent out a boat on purpose, to endeavour to find out an anchorage on the coast of Terra del Fuego; and they found a very good one S. W. of the isles Charles and Monmouth. I likewise gave them orders to observe the direction which the tide took in that channel.

1 Sir John Narborough. F.

2 *Laurier-epice*, spice-laurel is probably the famous *Winters-bark*, mentioned by Sir John Narborough, and afterwards well drawn and described by Sir Hans Sloane, in, his History of Jamaica, vol. ii. p. 87. t. 19. f. 2. and Plukenet. Amagest.89.t.81.f. i.and t. 160. f. 7. F

With their assistance, and the knowledge of anchoring-places, both to the northward and southward, I would have made sail, even though the wind should be contrary; but it was never moderate enough for me to do it.

Upon the whole, during our stay in this part of the straits, we observed constantly, that the tides set in as in the part of the narrows or guts; i. e. that the flood sets to the eastward, and the ebb to the westward.

Interview with and description of the Periaguas.

On the 6th, in the afternoon, we had some fair moments; and the wind too seemed to blow from S. E. we had already unmoored; but the moment we were setting sail, the wind came back to W. N. W. in squalls, which obliged us to moor again immediately. That day some savages came to visit us. Four periaguas appeared in the morning, at the point of Cape Galant; and, after stopping there for some time, three advanced into the bottom of the bay, whilst one made towards our frigate. After hesitating for about half an hour; they at last brought her along-side of us, with repeated shouts of *Pecberais*. In this boat were a man, a woman, and two children. The woman remained to take care of the periagua; and the man alone came on board, with much confidence, and with an air of gaiety. Two other periaguas followed the example of the first; and the men came on board the frigate with their children. Here they were soon very happy and content. We made them sing, and dance, let them hear music; and, above all, gave them to eat, which they did with much appetite. They found every thing good; whether bread, salt meat, or fat, they devoured what was offered to them. We found it rather difficult to get rid of these troublesome and disgusting guests; and we could not determine them to return to their periaguas, till we sent pieces of salt flesh down into them, before their faces. They shewed no surprise; neither at the sight of the ships, nor at the appearance of various objects, that offered themselves to their eyes; this certainly shews, that in order to be capable of being surprised at the work of art, one must have some fundamental ideas of it. These unpolished men, considered the master-pieces of human industry, in the same light as the laws of nature and its phenomena. We saw them often on board, and on shore, during several days which they stayed in Port Galant.

These savages are short, ugly, meagre, and have an insupportable stench about them. They are almost naked; having no other dress than wretched seal-skins, too little for them to wrap themselves in; these skins serve them equally as roofs to their huts, and as sails to their periaguas. They have likewise some guanaco-skins; but they are in small number. Their women are hideous, and seemed little regarded by the men. They are obliged to steer their periaguas, and to keep them in repair; often swimming to them, notwithstanding the cold, through the sea-weeds, which serve as a harbour to these periaguas, at a pretty distance from the shore, and scooping out the water that may have got into them. On the shore they gather wood and shells, without the men partaking in any thing of their labour; nor are those women, who have children at their breast, exempted from their task. They carry their children on their backs, folded in the skins, which serve them as dresses.

Their periaguas are made of bark, ill connected with rushes, and caulked with moss in the seams. In the middle of each is a little hearth of sand, where they always keep up some fire. Their arms are bows and arrows, made of the wood of a holly-leaved berberry-bush, which is common in the straits; the bow-string is made of a gut, and the arrows are armed with points of stone, cut with sufficient skill; but these weapons are made use of, rather against game, than against enemies; for they are as weak as the arms, which are destined to manage them. We

likewise saw amongst them, some bones of fish, about a foot long, sharp at the end, and toothed along one side. This is, perhaps, a dagger; or rather, as I think, an instrument for fishing: they fix it to a long pole, and use it as a harpoon. These Indians, men, women, and children, live promiscuously in their huts, in the middle of which they light a fire. They live chiefly on shell-fish; however, they have likewise dogs, and nooses, or springes, made of whalebone. I have observed, that they had all of them bad teeth; and, I believe, we must attribute that to their custom of eating the shell-fish boiling hot, though half raw.

Upon the whole, they seem to be good people; but they are so weak, that one is almost tempted to think the worse of them on that account. We thought we observed that they were superstitious and believed in evil genii; and, among them, the same persons, who conciliate the influence of those spirits, are their physicians and priests. Of all the savages I ever saw, the Pecherais are those who are most deprived of every convenience; they are exactly, in what may be called, a state of nature; and, indeed, if any pity is due to the fate of a man, who is his own master, has no duties or business to attend, is content with what he has, because he knows no better, I should pity these men; who, besides being deprived of what renders life convenient, must suffer the extreme roughness of the most dreadful climate in the world. These Pecherais, likewise, are the least numerous society of men I have met with in any part of the world; however, as will appear in the sequel, there are quacks among them: but as soon as more than one family is together, (by family, I understand father, mother, and children) their interests become complicated, and the individuals want to govern, either by force or by imposture. The name of family then changes into that of society; and though it were established amidst the woods, and composed only of cousins-german, a skilful observer would there discover the origin of all the vices, to which men, collected into whole nations, have, by growing more civilized, given names; vices that caused the origin, progress, and ruin of the greatest empires. Hence it follows, by the same principle, that in civilized societies, some virtues spring up, of which those who border on a state of nature are not susceptible.

The 7th and 8th the weather was so bad, that we could not by any means go from on board; in the night we drove, and were obliged to let go our sheet anchor. At some intervals the snow lay four inches deep on the deck; and, at day-break, we saw that all the ground was covered with it, except the flat lands, the wetness of which melted the snow. The thermometer was about 5° and 4° ; but fell to two degrees below the freezing-point. The weather was bad on the ninth in the afternoon. The Pecherais set out in order to come on board us. They had even spent much time at their toilet; I mean, they had painted their bodies all over, with red and white spots: but seeing our boats go from the ships, towards their huts, they followed them; but one periagua came on board the Etoile. She stayed but a short time there, and joined the others; who were very much the friends of our people. The women were, however, all retired into one hut; and the savages seemed uneasy, whenever one of our men attempted to go in. They invited them rather to come into the other huts, where they presented our gentlemen with muscles, which they sucked before they gave them away. They got some little presents, which they gladly accepted. They sung, danced, and appeared more gay, than one might expect from savages, whose outward behaviour is commonly serious.

Unlucky accident, which befalls one of them.

Their joy was but of very short duration. One of their children, about twelve years old, the only one in the whole troop whose figure engaged our attention, was all at once seized with spitting of blood, and violent convulsions. The poor creature had been on board the Etoile, where the people had given him bits of glass, not foreseeing the unhappy effect, which this present might have. These savages have a custom of putting pieces of talc into their throat and nostrils. Perhaps their superstition combines some powers with this kind of talisman; or, perhaps, they

look on it as a preservative against some sickness they are subject to. The child, probably, had made the same use of this glass. His lips, gums, and palate, were cut in several places, and he bled continually.

This accident spread consternation and mistrust; amongst them, They certainly suspected us of some bad action; for the first thing their juggler did, was to strip the child immediately of a linen jacket, which had been given him. He wanted to return it to the French; and upon their refusing it, he threw it at their feet. However, another savage, who, doubtless, loved clothes more than he feared enchantments, took it up immediately.

The juggler first laid the child down upon his back, in one of the huts; and, kneeling down between his legs, he bent himself upon him, and with his head and hands pressed the child's belly as much as he could, crying out continually, without our being able to distinguish any articulate sounds in his cries. From time to time he got up, and seeming to hold the disease in his joined hands, he opened them all at once into the air, blowing as if he wanted to drive away some evil spirit. During this ceremony, an old woman in tears, howled in the sick child's ears, enough to make him deaf. This poor wretch seemed to suffer as much from the remedy, as from the hurt he had received. The juggler gave him some respite, and went to fetch his habit of ceremony; after which, having his hair powdered, and his head adorned with two white wings, like those on Mercury's cap, he began his rites again, with more confidence, but with no better success. The child then appearing to be worse, our chaplain administered baptism to him by stealth.

The officers returned on board, and told me what had happened on shore. I went thither immediately with M. de la Porte, our surgeon, who brought some milk and gruel with him. When we arrived, the patient was out of the hut; the juggler, who had, now got a companion in the same dress, had begun again with his operation on the belly, thighs, and back of the child. It was a pity to see them torment the poor creature, who suffered without complaining. His body was already bruised all over; and the doctors still continued to apply their barbarous remedy, with abundance of conjurations. The grief of the parents, their tears, the part which the whole troop took in this accident, and which broke out in the most expressive signs, afforded us a most affecting scene. The savages certainly perceived that we partook of their distress; at least they seemed to be less mistrustful. They suffered us to come near the patient; and our surgeon examined his bloody mouth, which his father and another Pecherais sucked alternately. We had much trouble to persuade them to use milk; we were obliged to taste it before them several times; and, notwithstanding the invincible objection of their jugglers, the father at last resolved to let his son drink it; he even accepted a pot-full of gruel. The jugglers were jealous of our surgeon; whom, however, they seemed at last to acknowledge as an able juggler. They even opened for him a leather bag, which they always wear hanging by their side; and which contains their feathered cap, some white powder, some talc, and other instruments of their art; but he had hardly looked into it, when they shut it again. We likewise observed, that whilst one of the jugglers was conjuring the distemper of the patient, the other seemed to be busied solely in preventing, by his enchantments, the effect of the bad luck, which they suspected we had brought upon them.

We returned on board, towards night, and the child seemed to suffer less; however, he was plagued with almost continual puking, which gave us room to fear that some glass was got down into his stomach. We had afterwards sufficient reason to believe our conjectures had been true; for about two o'clock in the morning, we on board heard repeated howls; and, at break of day, though the weather was very dreadful, the savages went off. They, doubtless, fled from a place defiled by death, and by unlucky strangers, who they thought were come merely to destroy them. They were not able to double the westernmost point of the bay: in a more moderate interval they set sail again; a violent squall carried them out into the offing, and dispersed their feeble vessels. How desirous they were of getting away from us! They left one

of their periaguas, which wanted a repair on the shore, *Satis est gentem effugisse nefandam*. They are gone away, considering us as mischievous beings: but who would not pardon their resentment on this occasion? and, indeed, how great is the loss of a youth, who has escaped from all the dangers of childhood, to a body of men so very inconsiderable in number!

Continuation of bad weather.

The wind blew east with great violence, and almost without intermission, till the 13th, when the weather was mild enough in day-time; and we had even conceived hopes of weighing in the afternoon. The night between the 13th and 14th was calm. At half an hour past two in the morning we had unmoored, and hove a-peak. At six o'clock we were obliged to moor again, and the day was dreadful. The 15th, the sun shone almost the whole day; but the wind was too strong for us to leave the harbour.

Danger which the frigate is exposed to.

The 16th, in the morning, it was almost a calm; then came a breeze from the north, and we weighed, with the tide in our favour: it was then ebbing, and set to the westward. The winds soon shifted to W. and W. S. W. and we could never gain the Isle Rupert, with the favourable tide. The frigate sailed very ill; drove: to leeward beyond measure; and the Etoile had an incredible advantage over us. We plying all day between Rupert island, and a head-land of the continent, which we called the Point of the Passage, in order to wait for the ebb; with which I hoped either to gain the anchoring-place of Bay Dauphine, upon the isle of Louis le Grand, or that of Elizabeth bay. [1] But as we lost ground by plying, I sent a boat to sound to the S. E. of Rupert's-island, intending to anchor there, till the tide became favourable. They made signal of an anchoring-place, and came to a grapnel there; but we were already too much fallen to leeward of it. We made one board in-shore, to endeavour to gain it on the other tack; the frigate missed stays twice; and it became necessary to wear; but at the very moment when, by the manœuvres, and by the help of our boats, she began to wear, the force of the tide made her come to the wind again; a strong current had already carried us within half a cable's length of the shore. We let go our anchor in eight fathom: the anchor, falling upon rocks, came home, and our proximity to the shore did not allow us to veer away cable. We had now no more than three fathom and a half of water a-stern; and were only thrice the length of the ship from the shore, when a little breeze sprung up from thence, we immediately filled our sails, and the frigate fell to leeward: all our boats, and those of the Etoile, which came to our assistance, were a-head, towing her. We veered away our cable, upon which we had put a buoy; and near half of it was out, when it got foul between decks, and stopt the frigate, which then ran the greatest danger.

1 From Cape Galant to Bay Elizabeth, the coast runs nearly W. N. W. and the distance from the one to the other, is about four leagues. In this space there is no anchoring-place on the main-land. The depth is too great, even close to the shore. Bay Elizabeth is open to the S. W. Its breadth between the points is three quarters of a league; and its depth pretty near the same. The shore in the bottom of the bay is sandy and so is the S. E. shore. In its northern part lies a ledge, stretching a good way to the offing. The good anchoring in this bay is nine fathom, bottom of sand, gravel, and coral; and has the following marks: the E. point of the bay bears S. S. E. $\frac{1}{2}$ E. its W. point, W. b. N. The E. point of the isle of Louis le Grand, S. S. W. $\frac{1}{2}$ S. the ledge N. W. b. N.

We cut the cable, and by the prompt execution of this manœuvre, we saved the ship. The breeze at length freshened; and, after having made two or three unprofitable boards, I returned to Port Galant, where we anchored again in twenty fathom oozy bottom. Our boats, which I left to weigh our anchor, returned towards night with it and the cable. Thus this appearance of fine weather served only to give us cruel alarms.

Violent hurricane.

The day following was more stormy than all the preceding ones. The wind raised a mountainous sea in the channel; and we often saw several waves run in contrary directions. The storm appeared to abate towards ten o'clock; but at noon a clap of thunder, the only one we ever heard in this strait, was as it were the signal at which the wind again began to blow with more violence than in the morning. We dragged our anchor, and were obliged to let go our sheet-anchor, and strike our lower-yards and top-masts. Notwithstanding this, the shrubs and plants were now in flower, and the trees afforded a very brilliant verdure, which however was not sufficient to dispel that sadness which the repeated sight of this unlucky spot had cast over us. The most lively temper would be overcome in this dreadful climate, which is shunned by animals of every element, and where a handful of people lead a languid life, after having been rendered still more unfortunate by their intercourse with us.

Assertion concerning the channel of Sainte Barbe discussed.

On the 18th and 19th there were some intervals between the bad weather: we weighed our sheet anchor, squared our yards, and set up our top-masts; and I sent the *Etoile's* barge, which was in so good a condition as to be able to go out in almost any weather, to view the channel of *Sainte Barbe*. According to the extract M. Frezier gives of the Journal of M. Marcant, who discovered and passed through it, this channel must bear S. W. and S. W. by S. from Bay Elizabeth. The barge returned on the 20th, and M. Landais, who commanded it, informed me, that having followed the track and marks taken notice of by M. Marcant, he had not found the true mouth, but only a narrow channel, closed by shoals of ice and the land, which it is the more dangerous to follow, as it has not a single good anchoring place, and as it is crossed in the middle by a sand covered with muscles. He then went all round the isle of Louis le Grand to the southward, and re-entered the channel of Magalhaens, without having found any other. He only saw a fine bay on the coast of Terra del Fuego, which is certainly the same with that which Beauchesne calls Nativity Bay. Upon the whole, by going S. W. and S. W. by S. from Bay Elizabeth, as Frezier says that Marcant did, you must cut through the middle of the isle of Louis le Grand.

This information gave me room to believe that the channel of Sainte Barbe was opposite the very bay where we now lay. From the top of the mountains which surround Port Galant, we had often discovered southward of the isles Charles and Monmouth, a vast channel, full of little islands, and terminated by no land to the southward; but, as at the same time we perceived another inlet Southward of the isle of Louis le Grand, we took that for the channel of St. Barbe, as being more conformable to Marcant's account. As soon as we were sure that this inlet was no more than a deep bay, we no longer doubted that the channel of Sainte Barbe was opposite Port Galant, southward of Charles and Monmouth islands. Indeed, reading over again the passage in Frezier, and comparing it with his chart of the strait, we saw that Frezier, according to Marcant's report, places Elizabeth Bay, from whence the latter set sail, in order to enter into his channel, about ten or twelve leagues from Cape Forward. Marcant therefore must have

mistaken Bay De Cordes for Bay Elizabeth, the former lying actually eleven leagues from Cape Forward, being a league eastward of Port Galant setting sail from this bay, and standing S. E. and S. E. by S. he came along the westernmost point of Charles and Monmouth isles, the whole of which he took for the isle of Louis le Grand; an error into which every good navigator may easily fall, unless he is well provided with good directions: and then he stood into the channel full of isles, of which we had a prospect from the top of the mountains.

Utility which would accrue from the knowledge of the channel of Sainte Barbe.

The perfect knowledge of the channel of Sainte Barbe would be so much the more interesting, as it would considerably shorten the passing of the straits of Magalhaens. It does not take much time to come to Port Galant; the greatest difficulty before you come there, being to double Cape Forward, which is now rendered pretty easy, by the discovery of three ports upon Terra del Fuego: when you are once got to Port Galant, should the winds prevent your taking the ordinary channel, if they be ever so little upon the northerly points, the channel is open to you, opposite to this port; in twenty-four hours you can then be in the South Seas.

I intended to have sent two barges into this channel which I firmly believe to be that of Sainte Barbe; they would have completely solved this problem, but the bad weather prevented their going out.

Exceeding violent squall.

The 21st, and, and 23d, squalls, snow, and rain, were continual. In the night between the 21st and 22d, there was a calm interval; it seemed that the wind afforded us that momentary repose, only in order to fall harder upon us afterwards. A dreadful hurricane came suddenly from S. S. W. and blew with such fury as to astonish the oldest seamen. Both our ships had their anchors come home, and were obliged to let go their sheet-anchor, lower the lower yards, and hand the top-masts: our mizen was carried away in the brails. Happily this hurricane; did not last long. On the 24th the storm abated, we got calm weather and sun-shine, and put ourselves in a condition to proceed. Since our re-entering Port Galant, we took several ton weight of ballast, and altered our stowage, endeavouring by this means to make the frigate sail well again; and we succeeded in part. Upon the whole, whenever it is necessary to navigate in the midst of currents, it will always be found very difficult to manage such long vessels as our frigates generally are.

On the 25th, at one o'clock in the morning, we unmoored, and hove a peek; at three o'clock we weighed, and were towed by our boats; the breeze was northerly: at half past five it settled in

We leave Bay Fortescue.

the east, and we set all our top-gallant and studding-sails, which are very seldom made use of here. We kept the middle of the strait, following its windings, for which Narborough justly calls it Crooked Reach. Between the Royal Isles and the continent, the strait is about two leagues wide; the channel between Rupert Isle and Point Passage, is not above a league broad; then there is the breadth of a league and a half between the isle of Louis le Grand and Bay Elizabeth, on the easterly point of which, there is a ledge covered with sea weeds, extending a quarter of a league into the sea.

Description of the strait from Cape Galant to the open sea.

From Bay Elizabeth the coast runs W. N. W. for about two leagues, till you come to the river which Narborough calls Bachelor, and Beauchesne, du Massacre; at the mouth of which, is an anchoring-place. This river is easily known; it comes from a deep valley; on the west, it has a high mountain; its westerly point is low, wooded, and the coast sandy. From the river Bachelor, to the entrance of the false strait or St. Jerom's channel, I reckon three leagues, and the bearing is N. W. by W. The entrance of this channel seems to be half a league broad, and in the bottom of it, the lands are seen closing in to the northward. When you are opposite the river du Massacre, or Bachelor, you can only see this false strait, and it is very easy to take it for the true one, which happened even to us, because the coast then runs W. by S. and W. S. W. till Cape *Quade*, which stretching very far, seems to close in with the westerly point of the isle of Louis le Grand, and leave no outlet. Upon the whole, the safest way not to miss the true channel, is to keep the coast of Louis le Grand island on board, which may be done without any danger. The distance of St. Jerom's channel to Cape Quade, is about four leagues, and this cape bears E. 9° N. and W. 9° S. with the westerly point of the isle of Louis le Grand.

That island is about four leagues long, its north side runs W. N. W. as far as Bay Dauphine, the depth of which, is about two miles, and the breadth at the entrance, half a league; it then runs W, to its most westerly extremity, called Cape St. Louis. As, after finding out our error concerning the false strait, we run within a mile of the shore of Louis le Grand island, we distinctly saw Port Phelippeaux, which appeared to be a very convenient and well situated creek. At noon Cape Quade bore W. 13° S. two leagues distant, and Cape St. Louis, E. by N. about two leagues and a half off. The fair weather continued all day, and we bore away with all our sails set.

From Cape Quade the strait runs W. N. W. and N. W. by W. without any considerable turnings, from which it has got the name of Long-Lane, or Long-Reach, (*Longue Rue*). The figure of Cape Quade is remarkable. It consists of craggy rocks, of which, those forming its highest summits, do not look unlike ancient ruins. As far as this cape, the coasts are every where wooded, and the verdure of the trees softens the aspect of the frozen tops of the mountains. Having doubled Cape Quade, the nature of the country is quite altered. The strait is inclosed on both sides by barren rocks, on which there is no appearance of any soil. Their high summits are always covered with snow, and the deep vallies are filled with immense masses of ice, the colour of which bears the mark of antiquity. Narborough, struck with this horrid aspect, called this part, Desolation of the South, nor can any thing more dreadful be imagined.

Being opposite Cape Quade, the coast of Terra del Fuego seems terminated by an advanced cape, which is Cape Monday, and which I reckon is about fifteen leagues from Cape Quade. On the coast of the main land, are three capes, to which we gave names. The first, which from its figure, we called *Cap Fendu*, or Split Cape, is about five leagues from Cape Quade, between two fine bays, in which the anchorage is safe, and the bottom as good as the sheltered situation. The other two capes received the names of our ships, Cap de l'Etoile, three leagues west of Cap Fendu, and Cap de la Boudeuse, in the same situation, and about the same distance from the Cape of the Etoile. All these lands are high and steep; both coasts appear clear, and seem to have good anchoring places, but happily, the wind being fair for our course, did not give us time to sound them. The strait in this part, called *Longue Rue*, is about two leagues broad; it grows more narrow towards Cape Monday, where it is not above four miles broad.

Dangerous night.

At nine o'clock in the evening, we were about three leagues E. by S. and E. S. E. off Cape Monday. It always blew very fresh from east, and the weather being fine, I resolved to continue

my course during the night, making little sail. We handed the studding sails, and close-reefed the top-sails. Towards ten o'clock at night the weather became foggy, and the wind increased so much, that we were obliged to haul our boats on board. It rained much, and the weather became so black at eleven, that we lost all sight of land. About half an hour after, reckoning myself a-breast of Cape Monday, I made signal to bring-to on the star-board tack, and thus we passed the rest of the night, filling or backing, according as we reckoned ourselves to be too near one or the other shore. This night we have been in one of the most critical situations during the whole voyage.

At half an hour past three, by the dawn of day, we had sight of the land, and I gave orders to fill. We stood W. by N. till eight o'clock, and from eight till noon, between W. by N. and W. N. W. The wind was always east, a little breeze, and very misty. From time to time we saw some parts of the coast, but often we entirely lost sight of it. At last, at noon, we saw Cape Pillar, and the Evangelists. The latter could only be seen from the mast-head. As we advanced towards the side of Cape Pillar, we discovered, with joy, an immense horizon, no longer bounded by lands, and a great sea from the west, which announced a vast ocean to us. The wind did not continue E, it shifted to W. S. W. and we ran N. W. till half an hour past two, when Cape Victory bore N. W. and Cape Pillar, S. 3⁰ W.

End of the strait, and description of that part.

After passing Cape Monday, the north coast bends like a bow, and the strait opens to four, five, and six leagues in breadth. I reckon about sixteen leagues from Cape Monday to Cape Pillar, which terminates the south coast of the straits. The direction of the channel between these two capes, is W. by N. The southern coast is here high and steep, the northern one is bordered with islands and rocks, which make it dangerous to come near it: it is more prudent to keep the south coast on board. I can say no more concerning these land: I have hardly seen them, except at some short intervals, when the fogs allowed our perceiving but small parts of them. The last land you see upon the north coast, is Cape Victory (*Cap des Victoires*), which seems to be of middling height, as is Cape Deseado (*Desiré*), which is without the straits, upon Terra del Fuego, about two leagues S. W. of Cape Pillar. The coast between these two capes is bounded for near a league into the sea, by several little isles or breakers, known by the name of the Twelve Apostles.

Cape Pillar is a very high land, or rather a great mass of rocks, which terminates in two great cliffs, formed in the shape of towers, inclining to N. W. and making the extremity of the cape. About six or seven leagues N. W. of this cape, you see four little isles, called the Evangelists; three of them are low, the fourth, which looks like a hay-stack, is at some distance from the rest. They ly S. S. W. about four or five leagues off Cape Victory. In order to come out of the strait, it is indifferent whether you leave them to the south or northward; in order to go in, I would advise that they should be left to the northward. It is then likewise necessary to range along the southern coast; the northern one is bordered with little isles, and seems cut by large bays, which might occasion dangerous mistakes. From two o'clock in the afternoon, the winds were variable, between W. S. W. and W. N. W. and blew very fresh; we plyed till sun-setting, with all our sails set, in order to double the Twelve Apostles. We were for a long while afraid we should not be able to do it, but be forced to pass the night still in the straits, by which means we might have been obliged to stay there more than one day. But about six o'clock in the evening we gave over plying; at seven, Cape Pillar was doubled, and at eight we were quite clear of the land, and advancing, all sails set, and with a fine northerly wind, into the westerly ocean.

Departure taken from the strait of Magalhaens.

We then laid down the bearings whence I took my departure, in $52^{\circ} 50'$ S. lat. and $79^{\circ} 9'$ W. long, from Paris,

Thus, after constant bad and contrary weather at Port Galant, for twenty-six days together, thirty-six hours of fair wind, such as we never expected, were sufficient to bring us into the Pacific Ocean; an example, which I believe is the only one, of a navigation without anchoring from Port Galant to the open sea.

General observations on this navigation.

I reckon the whole length of the strait, from Cape Virgin (Mary) to Cape Pillar, at about one hundred and fourteen leagues. We employed fifty-two days to make them. I must repeat here, that from Cape Virgin to Cape Noir, we have constantly found the flood tide to set to the eastward, and the ebb to the westward, and that the tides are very strong; that they are not by much so rapid from Cape Noir to Port Galant, and that their direction is irregular there; that lastly, from Port Galant to Cape Quade, the tides are violent; that we have not found them very considerable from this cape to Cape Pillar, but that in all this part from Port Galant, the water is subject to the same laws which put them in motion from Cape Virgin; viz. that the flood runs towards the easterly, and the ebb towards the westerly seas. I must at the same time mention, that this assertion concerning the direction of the tides in the strait of Magalhaens, is absolutely contrary to what other navigators say they have observed there on this head. However, it would not be well if every one gave another account.

Upon the whole, how often have we regretted that we had not got the Journals of Narborough and Beauchesne, such as they came from their own hands, and that we were obliged to consult disfigured extracts of them: besides the affectation of the authors of such extracts, of curtailing every thing which is useful merely in navigation; likewise, when some details escape them that have a relation to that science, their ignorance of the sea-phrases makes them mistake necessary and usual expressions for vicious words, and they replace them by absurdities. All their aim is to compile a work agreeable to the effeminate people of both sexes, and their labour ends in composing a book that tires every body's patience, and is useful to nobody. [1]

Conclusions drawn from hence.

Notwithstanding the difficulties which we have met with in our passage of the strait of Magalhaens, I would always advise to prefer this course to that doubling Cape Horn, from the month of September to the end of March. During the other months of the year, when the nights are sixteen, seventeen, and eighteen hours long, I would pass through the open sea. The wind a-head, and a high sea, are not dangerous; whereas, it is not safe to be under a necessity of sailing blindfold between the shores. Certainly there will be some obstacles in passing the straits, but this retardment is not entirely time lost.

1 This complaint of our author is applicable only to the French publications, for it is well known that the English voyages, chiefly when published by authority, are remarkable both for the fine language, and the strict keeping of the marine phrases, so necessary to make these publications useful to future navigators, and which are understood by the greater part of this nation, so much used to the sea and its phrases, that our romances and plays are full of them, and that they have even a run in common life. F.

There is water, wood, and shells in abundance, sometimes there are likewise very good fish; and I make no doubt but the scurvy would make more havock among a crew, who should come into the South Seas by the way of Cape Horn, than among those who should enter the same Seas through the straits of Magalhaens: when we left it, we had no sick person on board.

END OF THE FIRST PART.

A

VOYAGE

ROUND THE

WORLD.

PART the SECOND.

From our entrance into the Western Sea, to our return to France.

Et nos jam tertia portat Omnibus errantes terris & fluctibus æstas. VIRG. Lib. I.

C H A P. I.

The run from the straits of Magalhaens to our arrival at the Isle of Taiti; discoveries which precede it.

January. 1768. Direction of our track, after our leaving the strait.

FROM our entrance into the Western Sea, after some days of variable winds, between S. W. and N. W. we soon got S. and S. S. E. winds. I did not expect to meet with them so soon; the west winds generally last to about 30⁰; and I intended to go to the isle of Juan Fernandez, in order to make good astronomi-observations there. I intended by this means to fix a sure point of departure, in order to cross this immense ocean the extent of which is differently laid down, by differently navigators. The early meeting with the S. and S. E. winds, obliged me to lay aside this scheme of putting in there, which would have prolonged my voyage.

Observation on the position of the coasts of Chili.

During the first days, I stood as near west as possible; as well to keep my wind, as to get off from the coast; the bearings of which are not laid down with any certainty in the charts: however, as the winds were then always in the western board, we should have fallen in with the

land, if the charts of Don George Juan, and Don Antonio de Ulloa had been exact. These Spanish officers have corrected the old maps of North America; [1] they make the coast run N. E. and S. E. between Cape Corso and Chiloe; and that upon conjectures, which they have certainly thought well-founded. This correction happily deserves another; it was not a very comfortable one for those navigators, who after coming out of the strait, endeavour to get to the northward, with winds which constantly vary from S. W. to N. W. by W. Sir John Narborough, after leaving the straits of Magalhaens, in 1669, run along the coast of Chili, examining all the inlets and creeks, as far as the river of Baldivia, into which he entered; he says expressly, that the course from Cape Desire to Baldivia is N. 5° E. This is something more certain than the conjectural assertion of Don George and Don Antonio. If, upon the whole, their conjecture had been true, by the course which we were obliged to take we must have fallen in with the land.

Order of sailing of the Boudeuse and Etoile.

When we were got into the Pacific Ocean, I agreed with the commander of the Etoile, that, in order to discover a greater space of the sea, he should go every morning southward, as far from me as the weather would allow, keeping within sight; and that every evening we should join; and that then he should keep in our wake, at about half a league's distance. By this means, if the Boudeuse had met with any sudden danger, the Etoile was enabled to give us all the assistance which the case might require. This order of sailing has been followed throughout the whole voyage.

Loss of a sailor fallen into the sea.

On the 30th of January, a sailor fell into the sea; our efforts were useless; and we were unable to save him: it blew very fresh, and we had a great sea.

Fruitless search for Davis land.

I directed my course for making the land, which Davis, [2] an English privateer, saw in 1686, between 27⁰ and 28° south latitude; and which Roggewein, a Dutchman [3] sought for in vain,

1768. February. Incertitude on the latitude of Easter island.

in 1722. I continued to stand in search of it till the 17th of February. According to M. de Bellin's chart, I must have sailed over this land on the 14th. I did not chuse to go in search of Easter island, as its latitude is not laid down with certainty. Many geographers agree in placing it in 27⁰ or 28° S. M. Buache, alone, puts it in 31⁰.

1 It must be supposed, that the author means South America. F.

2 Mr. Bougainville writes *David*: indeed, he and most writers of his nation, mutilate all foreign names; not only inadvertently, but often on purpose, through mere caprice. F.

3 A Mecklenburger, who, with his father, had been in the Dutch service. F.

However, on the 14th, being in $27^{\circ} 7'$ of latitude observed, and $104^{\circ} 12'$ computed west longitude, we saw two birds very like *Equerrets*, [1] which generally do not go further than 60 or 80 leagues from land; we likewise saw a tuft of that green plant, which fastens on ships' bottoms; and, for these reasons, I continued to stand on the same course till the 17th. Upon the whole, I think, from the account which Davis gives of the land he saw, that it is no other than the isles of St. Ambrose and St. Felix, which are two hundred leagues from the coast of Chili.

Meteorological observations.

From the 23d of February, to the 3d of March, we had westerly winds, constantly varying between S. W. and N. W, with calms and rain: every day, either a little before noon, or soon after, we had sudden gusts of rain, accompanied with thunder. It was strange to us to meet with this extraordinary wind, under the tropic, and in that ocean, so much renowned above all other seas, for the uniformity and the freshness of the E. and S. E. trade-winds; which are said to reign in it all the year round. We shall find more than one opportunity to make the same observation.

Astronomical observations, compared with the ship's reckoning.

During the month of February, M. Verron communicated to me the result of four observations, towards determining our longitude. The first, which was made on the 6th at noon, differed from my reckoning only $31'$; which I was more to the westward than his observation. The second, taken at noon on the 11th, differed from my estimated longitude $37^{\circ} 45''$, which I was to the eastward of him. By the third observation, made on the 22d, reduced to noon, I was more westward than he, by $42^{\circ} 30''$; and I had $1^{\circ} 25'$ of difference west, from the longitude determined by the observations of the 27th. Then we met with calms and contrary winds. The thermometer, till we came into 45° lat. always kept between 5° and 8° above the freezing-point: it then rose successively; and when we ran between 27° and 24° of lat. it varied from 17° to 19° . There was an almost epidemical sore-throat among the crew of my frigate, as soon as we had left the straits. As it was attributed to the snow-waters of the straits, I ordered every day, that a pint of vinegar, and red hot bullets should be put into the scuttled cask, containing the water for the crew to drink, on the upper deck. Happily these sore throats yielded to the simplest remedies; and, at the end of March, we had no-body upon the sick-list. Only four sailors were attacked by the scurvy. About this time we got plenty of Bonitos and Great-ears (*Grandes-Oreilles*); and, during eight or ten days, sufficient were taken to afford one meal a-day for the crews of both ships.

1 A kind of sea-fowl; probably of the gull or tern kind. F.

1768. March. Meeting with the first isles.

During March, we ran on the parallel of the first lands and isles marked on the chart of M. Bellin, by the name of Quiros's Isles. On the 21st we caught a tunny, in whose belly we found some little fish, not yet, digested, of such species as never go to any distance from the shore. This was a sign of the vicinity of land. Indeed, the 22^d, at six in the morning, we saw at once, four little isles, bearing S. S. E. $\frac{1}{2}$ E. and a little isle about four leagues west.

Observations on one of these isles.

The four isles I called *les quatre Facardins*; and as they were too far to windward, I stood for the little isle a-head of us. As we approached it, we discovered that it is surrounded with a very level sand, and that all the interior parts of it are covered with thick woods, above which the cocoa-trees raise their fertile heads. The sea broke much to the N. and S. and a great swell beating all along the eastern side, prevented our access to this isle in that part. However, the verdure charmed our eyes, and the cocoa-trees every where exposed their fruits to our sight, and over-shadowed a grass-plot adorned with flowers; thousands of birds were hovering about the shore, and seemed to announce a coast abounding in fish, and we all longed for a descent. We thought this would be easy on the western-side; and we ran along the coast at the distance of about two miles. We saw the sea break on every side with equal force, without a single harbour or creek, which might serve for shelter, or stem the force of the sea. Thus losing all hopes of landing there, unless at the evident risk of having our boats staved to pieces, we resumed our course again, when some of our people cried out, that they saw three men running to the sea-shore.

It is inhabited, notwithstanding its small size.

We should never have thought that so small an isle could be inhabited; and my first conjectures were, that some Europeans must certainly have been ship-wrecked upon it. I presently gave orders to lay-to; as I was determined to do all I could to save them. These men were returned into the woods; but soon after they came out again, fifteen or twenty in number, and advanced very fast; they were naked, and bore very long pikes, which they brandished against the ships, with signs of threatening; after this bravado, they retired to the woods, where we could distinguish their huts, by means of our glasses. These men seemed very tall, and of a bronze colour—Who can give an account of the manner in which they were conveyed hither, what communications they have with other beings, and what becomes of them when they multiply on an isle, which has no more than a league in diameter? I called it *Isle des Lanciers*. [1] Being less than a league to the N. E. of this isle, I made the signal to the *Etoile* to sound; she did so with a line of two hundred fathom, without finding any bottom.

From that day we always shortened sail at night, fearing to meet all at once some of these low-lands, to which it is so dangerous to come near. We were obliged to bring-to, [2] during a part of the night, between the 22^d and 23^d; as we had a storm, with very high wind, rain, and thunder.

1 Isle of Lancebearers.

2 *Rester en travers*.

Farther meeting with islands.

At day-break we saw land, bearing from us, from N. E. b. N. to N. N. W. We stood for it, and at eight o'clock were about three leagues from its easternmost point. Then, though it was somewhat hazy, we perceived breakers along this coast, which appeared very low, and covered with trees: therefore, we stood out to sea again, waiting for the fair weather to allow us to come nearer the coast at a less risk; this we were able to do towards ten o'clock. Being only one league off the island, we ran along it, endeavouring to find a proper landing-place; we could not find bottom with 120 fathom. A bar, over which the sea broke with great violence, lay along the whole coast; and we soon discovered, that this island is formed by two very narrow slips of land, which join at the N. W. end, and leave an opening to the S. E. between their extremities.

Description of the largest of these isles.

The middle of this isle is therefore occupied by the sea, in all its length, which is about ten or twelve leagues S. E. and N. W. so that it appears like a very oblong horse-shoe, whereof the opening or entrance is at S. E.

The two necks of land are so very narrow, that we could perceive the sea beyond the most northerly one. They seem composed of nothing but sandy downs, interspersed with low grounds, without either trees or verdure. The higher downs are covered with cocoa-nut and other lesser trees; which were very shady. After noon we saw periaguas in the kind of lake which this island forms; some sailing, others paddling. The savages in them were naked. In the evening we saw a great number of these islanders along the coast. They likewise seemed to have such long lances as the inhabitants of the first island threatened us with. We had not yet found any place where our canoes could land. The sea foamed every where with equal violence. Night interrupted our researches; we passed it plying under our top-sails; and not discovering any landing-place, on the 24th in the morning, we continued our course, and left this inaccessible island; which, on account of its figure, I called *Harp Island*. I question whether this extraordinary land is rising and encreasing, or whether it is decaying? How was it peopled? Its inhabitants appeared to us tall and well proportioned. I admire their courage, if they live unconcerned on these little slips of land, which are exposed to be buried in the sea every moment by a hurricane.

The same day, at five in the afternoon, we saw another land, about seven or eight leagues distant; the uncertainty of its position, the inconstant squally and tempestuous weather, and the obscurity of the night obliged us to stand off and on. The 25th, in the morning, we came near the land, which we found to be another very low island, extending S. E. and N. W. about twenty-four leagues. We continued till the 27th to sail between low and partly overflowed islands, four of which we examined, all of the same nature, and all inaccessible, and not deserving that we should lose our time in visiting them. I gave the name of *Dangerous Archipelago* to this cluster of islands; of which we saw eleven, and which are probably more numerous. It is very dangerous sailing amidst the low isles, surrounded with breakers and shoals; where it is necessary, especially at night, to use the utmost precaution.

I determined to stand more southerly, in order to get clear of these dangerous parts. Indeed, on the 28th, we ceased to see the land. Quiros, discovered first, in 1606, the south end of this chain of islands, which extend W.N. W. and among which admiral Roggewein found himself engaged in 1722, in about 15⁰ lat. he called them the *Labyrinth*. Upon the whole, I know not on what grounds our geographers lay down after these isles, a beginning of land seen, as they say, by Quiros, and to which they give seventy leagues of extent. All that can be inferred from the Journal of this navigator is, that the first place he *landed* at, after his departure from Peru, was eight leagues in extent. But far from considering it as a considerable coast, he says, that the

savages who inhabit it, gave him to understand, that he should find great countries in his way. [1] If any considerable land existed hereabouts, we could not fail meeting with it; as the least latitude we were hitherto arrived at, was $17^{\circ} 40'$ S. which is the same that Quiros observed on this very coast, whereof the geographers have been pleased to make a great continent. I agree, that it is difficult to conceive such a number of low islands, and almost drowned lands, without supposing a continent near it. But Geography is a science of facts; in studying it, authors must by no means give way to any system, formed in their studies, unless they would run the risk of being subject to very great errors, which can be rectified only at the expence of navigators.

Astronomical observations compared with my reckoning.

Mr. Verron, in March, gave me three observations of longitude. The first, taken by Hadley's octant, on the 3d in the afternoon, was only $21' 30''$ different from my reckoning, I being so much to the westward of the observed longitude. The second, made by the megameter, and reduced to noon of the 10th, differed considerably from my reckoning, as my computed longitude was $3^{\circ} 6'$ more westward than that taken by observation. On the contrary, from the result of the third observation, taken with the octant on the 27th, my reckoning agreed within $39' 15''$ which he found I was more eastward than his longitude. It must be observed; that since my leaving the straits of Magalhaens, I have always followed the longitude of my departure, without correcting it in the least, or making use of the observations.

Meteorological observations.

The thermometer [2] constantly kept between 19° and 20° , during this month, and even near the land. Towards the end of the month, we had five days west winds, with squalls and storms, which succeeded each other almost without interruption. It rained continually; and the scurvy made its appearance on eight or ten persons of the crew. Moistness is one of the most powerful

Advantageous use of lemonade powder at sea. Water deprived of its salt.

causes of this disease. Each sailor got daily a pint of lemonade, prepared with a kind of powder, called powder of *faciot* which we made great use of, during the course of this voyage. On the third of March I had likewise begun to make use of the distilling apparatus of M. Poissonier; and we continued till we arrived at New Britain to make use of the seawater, which was by this means deprived of its salt; employing it in broth, and in boiling meat and legumes. The supply of water it procured us, during this long run, was a very great resource.

1 The continent, which the geographers place in these parts ought to have been laid down only as a sign of land, which Quiros says he met with the 27th of January 1606. But these signs of continent Quiros found before he came to the isle of Sagittaria, which is the first he landed at, after sailing from Peru. See Mr. *Dalrymple's Historical Collection of Voyages in the South Pacific Ocean*, part i. 107, 108. and the chart of the South Seas annexed. F

2 Reaumur's

1768. April.

We lighted our fire at five in the evening, and put it out by five or six in the morning, making above a barrel of water every night. By way of sparing our fresh water, we always kneaded our bread with salt water.

Second division of lands. Archipelago of Bourbon.

The second of April, at ten in the morning, we perceived to the N. N. E. a high and very steep mountain, seemingly surrounded by the sea. I called it the *Boudoir*, or the *Peak of the Boudeuse*.

Sight of Taiti.

We stood to the northward, in order to make it plain, when we saw another land, bearing W. by N. the coast of which was not so high, but afforded an indeterminate extent to our eyes. We had a very urgent necessity for touching at some place where we might get refreshments and wood, and we flattered ourselves to find them on this land. It was a calm almost the whole day. In the evening a breeze sprung up, and we stood towards the land till two in the morning, when we stood off shore again, for three hours together. The sun rose obscured by clouds and haze; and it was nine o'clock in the morning before we could see the land again, its southermost point then bearing W. by N. We could no longer see the peak of the Boudeuse, but from the mast-head. The wind blew N. and N. N. E. and we stood as close upon it as we could, in order to fall in to windward of the island. As we came nearer we saw, beyond its northermost point, a distant land, still further to northward, without our being able at that time to distinguish whether it joined to the first isle, or whether it formed a second.

Manceuvres in order to land there.

During the night, between the third and fourth, we turned to windward, in order to get more to the northward. With joy we saw fires burning on every part of the coast, and from thence concluded that it was inhabited.

The 4th, at day-break, we discovered that the two lands, which before appeared separate, were united together by a low land, which was bent like a bow, and formed a bay open to the N. E. We run with all sails set towards the land, standing to windward of this bay, when we perceived a periagua coming from the offing, and standing for the land, and making use of her sail and paddles. She passed athwart us, and joined a number of others, which sailed a-head of us, from all parts of the island. One of them went before all the rest; it was manned by twelve naked men, who presented us with branches of bananas; and their demonstrations signified that this

First traffic with these islanders.

was their olive-branch. We answered them with all the signs of friendship we could imagine; they then came along side of our ship; and one of them, remarkable for his prodigious growth of hair, which stood like bristles divergent on his head, offered us, together with his branch of peace, a little pig, and a cluster of bananas. We accepted his present, which he fastened to a rope that was thrown over to him; we gave him caps and handkerchiefs; and these first presents were the pledges of our alliance with these people.

The two ships were soon surrounded with more than an hundred periaguas of different sizes, all which had outriggers. They were laden with cocoa-nuts, bananas, and other fruits of the

country. The exchange of these fruits, which were delicious to us, was made very honestly for all sorts of trifles; but without any of the islanders venturing to come aboard. We were obliged either to come into their periaguas, or shew them at a distance what we offered in exchange; when both parties were agreed, a basket or a net was let down by a rope; they put their goods in it, and so we did ours; giving before they had received, or receiving before they gave indifferently, with a kind of confidence, which made us conceive a good opinion of their character. We further saw no kind of arms in their periaguas, in which there were no women at this first interview. The periaguas kept along-side of the ships, till the approach of night obliged us to stand off shore, when they all retired.

We endeavoured, during night, to go to the northward, never standing further than three leagues from the land. All the shore was, till near midnight, covered as the night before, with little fires at a short distance from each other: it seemed as if it was an illumination made on purpose, and we accompanied it with several sky-rockets from both our ships.

The 5th we spent in plying, in order to work to windward of the island, and in letting the boats sound for an anchoring-place. The aspect of this coast, elevated like an amphitheatre, offered us the most enchanting prospect. Notwithstanding the great height of the mountains, none of

Description of the coast as seen from the offing.

the rocks has the appearance of barrenness; every part is covered with woods. We hardly believed our eyes, when we saw a peak covered with trees, up to its solitary summit, which rises above the level of the mountains, in the interior parts of the southernmost quarter of the island. Its apparent size seemed to be no more than of thirty toises in diameter, and grew less in breadth as it rose higher. At a distance it might have been taken for a pyramid of immense height, which the hand of an able sculptor had adorned with garlands and foliage. The less elevated lands are interspersed with meadows and little woods; and all a-long the coast there runs a piece of low and level land, covered with plantations, touching on one side the sea and on the other bordering the mountainous parts of the country. Here we saw the houses of the islanders amidst bananas, cocoa-nut, and other trees loaded with fruit.

As we ran along the coast, our eyes were struck with the sight of a beautiful cascade, which came from the tops of the mountains, and poured its foaming waters into the sea. A village was situated at the foot of this cascade, and there appeared to be no breakers in this part of the coast. We all wished to be able to anchor within reach of this beautiful spot; we were constantly sounding aboard the ships, and our boats took soundings close under the shore; but we found a bottom of nothing but rocks in this port, and were forced to go in search of another anchorage.

Continuation of the traffic with the islanders.

The periaguas returned to the ship at sun-rising, and continued to make exchanges all the day. We likewise opened new branches of commerce; for, besides the fruits, which they brought the day before, and other refreshments, such as fowls and pigeons, the islanders brought with them several instruments for fishing; stone chisels, (*herminettes de pierre*) strange kinds of cloth, shells, &c. They wanted iron and ear-rings in exchange. This bartering trade was carried on very honestly, as the day before: this time some pretty and almost naked women came in the periaguas. One of the islanders went on board the *Etoile*, and stayed there all night, without being in the least uneasy.

This night was likewise spent in plying; and on the 6th in the morning we were got to the most northerly extremity of the island. Another isle now came within sight: but seeing several breakers that seemed to obstruct the passage between the two isles, I determined to return in search of anchorage in the first bay, which we saw on the day of our land-fall. Our boats which

sounded a-head of us towards shore, found the north side of the bay every where surrounded, at a quarter of a league's distance, by a reef which appears at low water. However, about a league from the north point, they discovered a gap in the reef, of the width of twice a cable's length at most, where there was 30 and 35 fathom of water, and within it a pretty extensive road, where the bottom varied from nine to thirty fathom. This road was bounded to the south by a reef, which, proceeding from the land, joined that which surrounded the shore. Our boats had constantly found a sandy bottom, and discovered several little rivers fit for watering at. Upon the reef, on the north side, there are three little islands.

Anchorage at Taiti.

This account determined me to come to an anchor in the road, and we immediately made sail to enter into it. We ranged the point of the starboard reef in entering; and as soon as we were got within it, we let go our best bower in 34 fathom, bottom of grey sand, shells, and gravel; and we immediately carried out the stream-anchor to the north-west, in order to let go our small bower there. The Etoile went to windward, and came to an anchor a cable's length to the northward of us. As soon as we were moored, we struck yards and top-masts.

Difficulty of mooring the ships.

As we came nearer the shore, the number of islanders surrounding our ships increased. The periaguas were so numerous all about the ships, that we had much to do to warp in amidst the croud of boats and the noise. All these people came crying out *tayo*, which means friend, and gave a thousand signs of friendship; they all asked nails and ear-rings of us. The periaguas were full of females; who, for agreeable features, are not inferior to most European women; and who in point of beauty of the body might, with much reason, vie with them all. Most of these fair females were naked; for the men and the old women that accompanied them, had stripped them of the garments which they generally dress themselves in. The glances which they gave us from their periaguas, seemed to discover some degree of uneasiness, notwithstanding the innocent manner in which they were given; perhaps, because nature has every where embellished their sex with a natural timidity; or because even in those countries, where the ease of the golden age is still in use, women seem least to desire what they most wish for. The men, who were more plain, or rather more free, soon explained their meaning very clearly. They pressed us to choose a woman, and to come on shore with her; and their gestures, which were nothing less than equivocal, denoted in what manner we should form an acquaintance with her. It was very difficult, amidst such a sight, to keep at their work four hundred young French sailors, who had seen no women for six months. In spite of all our precautions, a young girl came on board, and placed herself upon the quarter-deck, near one of the hatchways, which was open, in order to give air to those who were heaving at the capstern below it. The girl carelessly dropt a cloth, which covered her, and appeared to the eyes of all beholders, such as Venus shewed herself to the Phrygian shepherd, having, indeed, the celestial form of that goddess. Both sailors and soldiers endeavoured to come to the hatch-way; and the capstern was never hove with more alacrity than on this occasion.

At last our cares succeeded in keeping these bewitched fellows in order, though it was no less difficult to keep the command of ourselves. One single Frenchman, who was my cook, having found means to escape against my orders, soon returned more dead than alive. He had hardly set his feet on shore, with the fair [one], whom he had chosen, when he was immediately surrounded by a croud of Indians, who undressed him from head to feet. He thought he was utterly lost, not knowing where the exclamations of those people would end, who were tumultuously examining every part of his body. After having considered him well, they

returned him his clothes, put into his pockets whatever they had taken out of them, and brought the girl to him. desiring him to content those desires which had brought him on shore with her. All their persuasive arguments had no effect; they were obliged to bring the poor cook on board, who told me, that I might reprimand him as much as I pleased, but that I could never frighten him so much, as he had just now been frightened on shore.

CHAP. II.

Stay at Taiti; account of the good and evil which befel us there.

Landing.

I have pointed out the obstacles which we met with coming to an anchor. When we were moored, I went on shore with several officers, to survey the watering-place. An immense croud of men and women received us there, and could not be tired with looking at us; the boldest among them came to touch us; they even pulled aside our clothes with their hands, in order to see whether we were made exactly like them: none of them wore any arms, not so much as a stick.

Visit paid to the chief of the district.

They sufficiently expressed their joy at our arrival. The chief of this district conducted and introduced us into his house, in which we found five or six women, and a venerable old man. The women saluted us, by laying their hands on their breasts, and saying several times *tayo*. The old man was the father of our host. He had no other character of old age, than that respectable one which is imprinted on a fine figure. His head adorned with white hair, and a long beard; all his body, nervous and fleshy, had neither wrinkles, nor shewed any marks of decrepitude. This venerable man seemed to be rather displeased with our arrival; he even retired without answering our civilities, without giving any signs of fear, astonishment, or curiosity; very far from taking part in the raptures all this people was in at our sight, his thoughtful and suspicious air seemed to shew that he feared the arrival of a new race of men would trouble those happy days which he had spent in peace.

Description of his house.

We were at liberty to examine the interior parts of the house. It had no furniture, no ornament to distinguish it from the common huts, except its extent; It was about eighty feet long and twenty feet wide. In it we observed a cylinder of ozier, three or four feet long, set with black feathers, which was suspended from the thatch; and besides it, there were two wooden figures which we took for idols. One, which was their god, [1] stood upright against one of the pillars; the goddess was opposite, leaned against the wall, which she surpassed in height, and was fastened to the reeds, of which their walls are made. These figures, which were ill made, and without any proportion, were about three feet high, but stood on a cylindrical pedestal, hollow within, and carved quite through. This pedestal was made in the shape of a tower, was six or seven feet high, and about a foot in diameter. The whole was made of a black and very hard wood.

1 The people of *Otahitee*, or as our author wrongly calls it, *Taiti*, are not idolaters, according to the last published account, and therefore it is certain, that Mr. de B. took some ornamental figures for those of their divinities. Had this circumnavigator made a longer stay in this island, had he thoroughly studied the language of the country, and looked upon many things with a more philosophical, or less prejudiced eye, his account would have proved less subject to the mistakes it abounds with. The English, more used to philosophical enquiries, will give more faithful accounts in the work that is going to be published, of the great discoveries made by the British nation in those seas. F.

The chief and all his people accompanied us to our boats. We were almost come to them when we were stopped by an islander, of a fine figure, who lying

Reception which he gives us.

The chief then proposed that we should sit down upon the grass before his house, where he ordered some fruit, broiled fish and water to be set before us: during the meal he sent for some pieces of cloth, and for two great collars or gorgets of oziers, covered with black feathers and shark's teeth. They are pretty like in form to the immense ruffs, worn in the time of Francis the first. One of these he put upon the neck of the Chevalier d'Oraison, another upon mine, and distributed the cloths. We were just going to return on board when the Chevalier de Suzannet missed a pistol, which had been very dexterously stolen out of his pocket. We informed the chief of it, who immediately was for searching all the people who surrounded us, and even treated some of them very harshly. We stopt his researches, endeavouring only to make him understand, that the thief would fall a victim to his own crime, and that what he had stolen could kill him.

The chief and all his people accompanied us to our boats. We were almost come to them when we were stopped by an islander, of a fine figure, who lying under a tree, invited us to sit down by him on the grass. We accepted his offer: he then leaned towards us, and with a tender air he slowly sung a song, without doubt of the Anacreontic kind, to the tune of a flute, which another Indian blew with his nose: this was a charming scene, and worthy the pencil of a Boucher. Four islanders came with great confidence to sup and lye on board. We let them hear the music of our flutes, base-violos, and violins, and we entertained them with a fire-work of sky-rockets and fire-snakes. This sight caused a mixture of surprize and of horror in them.

On the 7th in the morning, the chief, whose name was Ereti, came on board. He brought us a hog, some fowls, and the pistol which had been stolen at his house the day before. This act: of justice gave us a good opinion of him. However, we made every thing ready in the morning, for

Project of a camp for our sick on shore.

landing our sick people, and our water casks, and leaving a guard for their defence. In the afternoon I went on shore with arms and implements, and we began to make a camp on the banks of a little brook, where we were to fill our water. Ereti saw the men under arms, and the preparations for the encampment, without appearing at first surprised or discontented.

Opposition on the part of the islanders.

However, some hours after he came to me, accompanied by his father and the principal people of the district, who had made remonstrances to him on this occasion, and gave me to understand that our stay on shore displeased them, that we might stay there during day-time as long as we pleased, but that we should ly on board our ships at night. I insisted upon establishing the camp, making him comprehend that it was necessary to us, in order to get wood and water, and to facilitate the exchanges between both nations. They then held a second council, the remit of which, was, that Ereti came to ask me whether we intended to stay here for ever, or whether we intended to go away again, and how soon that would be. I told him that we should set sail in eighteen days, in sign of which, I gave him eighteen little stones. Upon this they held a new conference, at which they desired I would be present. A grave man, who seemed to have much weight with the members of the council, wanted to reduce the number of

They consent to it on some conditions.

days of our encamping to nine; but as I insisted on the number I had at full required, they at last gave their consent.

From that moment their joy returned; Ereti himself offered us an extensive building like a shed, close to the river, under which were some periaguas, which he immediately got taken away.

Establishment of a camp for our sick and the artificers.

Under this shed we raised the tents for those who were ill of the scurvy, being thirty-four in number, twelve from the Boudeuse, and twenty-two from the Etoile, and for some necessary hands. The guard consisted of thirty soldiers, and I likewise landed muskets enough to arm the workmen and the sick. I staid on shore the first night, which Ereti likewise chose to pass under our tents. He ordered his supper to be brought, and joined it to ours, driving away the crowd which surrounded the camp, and retaining only five or six of his friends. After supper he desired to see some sky-rockets played off, and they frightened him at least as much as they gave him pleasure. Towards the end of night he sent for one of his wives, whom he sent to sleep in prince Nassau's tent. She was old and ugly.

Precautions taken. Conduct of the natives.

The next day was spent in completing our camp. The shed was well made, and entirely covered over by a kind of mats. We left only one entrance to it, which we provided with a barrier, and placed a guard there. Ereti, his wives and his friends alone were allowed to come in; the crowd kept on the outside of the shed, and only a single man of our people with a switch in his hand was sufficient to clear the way. Hither the natives from all sides brought fruits, fowls, hogs, fish, and pieces of cloth, which they exchanged for nails, tools, beads, buttons, and numberless other trifles, which were treasures to them. They were, upon the whole, very attentive to learn what would give us pleasure; they saw us gathering antiscorbutic plants, and searching for shells: their women and children soon vied with each other in bringing us bundles of the same plants, which they had seen us collecting, and baskets full of shells of all sorts. Their trouble was paid at a small expence.

Assistance they give us.

This same day I desired the chief to shew me where I might cut wood. The low country where we were, was covered only with fruit trees, and a kind of wood full of gum, and of little confidence; the hard wood grows upon the mountains, Ereti pointed out to me the trees which I might cut down, and even shewed towards which side I should fell them. The natives assisted us greatly in our works; our workmen cut down the trees and made them into faggots, which the islanders brought to the boats; they likewise gave us their assistance in making our provision of water, filling the casks, and bringing them to the boats. Their labour was paid in nails, of which, the number was proportionate to the work they had done. The only constraint which their presence put upon us, was, that they obliged us to have our eyes upon every thing that was brought on shore, and even to look to our pockets; for even in Europe itself, one cannot see more expert filchers than the people of this country.

However, it does not appear that stealing is usual among themselves. Nothing is shut up in their houses, every piece of furniture lies on the ground, or is hung up, without being under locks, or under any person's care.

Precautions taken against thieves.

Doubtless their curiosity for new objects excited violent desires in them; and besides that, there are always base-minded people every where. During the two first nights we had some things stolen from us, notwithstanding our guards and patrols, at whom the thieves had even thrown stones. These thieves hid themselves in a marsh full of grass and reeds, extending behind our camp. This marsh was partly cleared by my orders and I commanded the officer upon duty to fire upon any thieves who should come for the future. Ereti himself told me to do it, but took great care to shew me several times the spot where his house was situated, earnestly recommending it to me, to fire towards the opposite quarter. I likewise sent every evening three of our boats, armed with pedereroes and swivel guns, to ly at anchor before the camp. All our transactions were carried on in as friendly a manner as possible, if we except thieving. Our people were daily walking in the isle without arms, either quite alone, or in little companies. They were invited to enter the houses, where the people gave them to eat; nor did the civility of their landlords stop at a slight collation,- they offered them young girls; the hut was immediately filled with a curious croud of men and women, who made a circle round the guest, and the young victim of hospitality. The ground was spread with leaves and flowers, and their musicians sung an hymeneal song to the tune of their flutes. Here Venus is the goddess of hospitality, her worship does not admit of any mysteries, and every tribute paid to her is a feast for the whole nation. They were surprised at the confusion which our people appeared to be in, as our customs do not admit of these public proceedings. However, I would not answer for it, that every one of, our men had found it impossible to conquer his repugnance, and conform to the customs of the country.

Beauty of the interior parts of the country.

I have often, in company with only one or two of our people, been out walking in the interior parts of the isle. I thought I was transported into the garden of Eden; we crossed a turf, covered with fine fruit-trees, and intersected by little rivulets, which keep up a pleasant coolness in the air, without any of those inconveniences which humidity occasions. A numerous people there enjoy the blessings which nature showers liberally down upon them. We found companies of men and women sitting under the shade of their fruit-trees: they all greeted us with signs of friendship; those who met us upon the road stood aside to let us pass by; every where we found hospitality, ease, innocent joy, and every appearance of happiness amongst them.

Presents of European fowls and seeds made to the chief.

I presented the chief of the district in which we were with a couple of turkies, and some ducks and drakes; they were to be considered as the mites of the widow. I likewise desired him to make a garden in our way, and to sow various sorts of seeds in them, and this proposal was received with joy. In a short time, Ereti prepared a piece of ground, which had been chosen by our gardeners, and got it inclosed. I ordered it to be dug; they admired our gardening instruments. They have likewise around their houses a kind of kitchen gardens, in which they plant an eatable hibiscus or okra, potatoes, yams, and other roots. We sowed for their use some wheat, barley, oats, rice, maize, onions, and pot herbs of all kinds. We have reason to believe that these plantations will be taken care of; for this nation appeared to love agriculture, and would I believe be easily accustomed to make advantage of their soil, which is the most fertile in the universe.

Visit of the chief of a neighbouring district.

During the first days of our arrival, I had a visit from the chief of a neighbouring district, who came on board with a present of fruits, hogs, fowls, and cloth. This lord, named *Toutaa*, has a fine shape, and is prodigiously tall. He was accompanied by some of his relations, who were almost all of them six feet (French measure) high; I made them presents of nails, some tools, beads, and silk stuffs. We were obliged to repay this visit at his house, where we were very well received, and where the good-natured *Toutaa* offered me one of his wives, who was very young and pretty handsome. The assembly was very numerous, and the musicians had already began the hymenean. Such is their manner of receiving visits of ceremony.

On the 10th, an islander was killed, and the natives came to complain of this murder. I sent some people to the house, whither they had brought the dead body; it appeared very plain that the man had been killed by a fire-arm. However, none of our people had been suffered to go out of the camp, or to come from the ships with fire-arms. The most exact enquiries which I made to find out the author of this villainous action proved unsuccessful. The natives doubtless believed that their countryman had been in the wrong; for they continued to come to our quarters with their usual confidence. However, I received intelligence that many of the people had been seen carrying off their effects to the mountains, and that even *Ereti's* house was quite unfurnished. I made him some more presents, and this good chief continued to testify the sincerest friendship for us.

I hastened in the mean while the completing of our works of all kinds; for though this was an excellent place to supply our wants at, yet I knew that we were very ill moored. Indeed, though we under-run the cables almost every day with the long boat, and had not yet found them chafed, [1] yet we had found the bottom was strewed with large coral; and besides, in case of a high wind from the offing, we had no room to drive. Necessity had obliged us to take this anchorage, without leaving us the liberty of choosing, and we soon found that our fears were but too well grounded.

Loss of our anchors, danger which we meet with.

The 12th, at five in the morning, the wind being south, our S. E. cable, and the hawser of the stream-anchor, which by way of precaution we had extended to the E. S. E. parted at the bottom

Account of the manœuvres which saved us.

We immediately let go our sheet-anchor, but before it had reached the bottom, the frigate swung off to her N. W. anchor, and we fell aboard the *Etoile* on the larboard side. We hove upon our anchor, and the *Etoile* veered out cable as fast as possible, so that we were separated before any damage was done. The store ship then sent us the end of a hawser, which she had extended to the eastward, and upon which we hove, in order to get farther from her. We then weighed our sheet-anchor, and hove in our hawser and cable, which parted at the bottom. The latter had been cut about thirty fathom from the clinch; we shifted it end for end, and bent it to a spare anchor of two thousand seven hundred weight, which the *Etoile* had stowed in her hold, and which we sent for.

Our S. E. anchor, which we had let go without any buoy-rope, on account of the great depth, was entirely lost; and we endeavoured, without success, to save the stream-anchor, whose buoy was sunk, and for which it was impossible to sweep the bottom. We presently swayed up our fore-top-mast and fore-yard, in order to be ready for sailing as soon as the wind should permit. In the afternoon the wind abated and shifted to the eastward. We then carried out to the S. E. a stream-anchor, and the anchor we had got from the Etoile, and I sent a boat to sound to the northward, in order to know whether there was a passage that way, by which means we might have got out almost with any wind. One misfortune never comes alone; as we were occupied

Another murder of some islanders.

with a piece of work on which our safety depended, I was informed that three of the natives had been killed or wounded with bayonets in their huts, that the alarm was spread in the country, that the old men, the women and the children fled towards the mountains with their goods, and even the bodies of the dead, and that we should perhaps be attacked by an army of these enraged men. Thus our situation gave us room to fear a war on shore, at the very moment when both ships were upon the point of being stranded. I went ashore, and came into the camp, where, in presence of the chief, I put four soldiers in irons, who were suspected to be the authors of this crime: these proceedings seemed to content the natives.

Precautions against the consequences which it might have had.

I passed a part of the night on shore, and reinforced the watches, fearing that the inhabitants might revenge their countrymen. We occupied a most excellent post between two rivers, distant from each other at most only a quarter of a league; the front of the camp was covered by a marsh, and on the remaining side was the sea, of which we certainly were the masters. We had a fair chance to defend this post against the united forces of the whole island; but happily the night passed very quietly in the camp, excepting some alarms occasioned by thieves.

Continuation of the dangers which the ships run.

It was not from this part that I dreaded the worst that could happen; the fear of seeing the ships loft upon the coast, gave me infinitely more concern. From ten o'clock in the evening, the wind freshened very much from the east; and was attended with a great swell; rain, tempest, and all the sad appearances which augment the horror of these dreadful situations.

Towards two o'clock in the morning, a squall drove the ships towards the coast: I came on board; the squall happily was not of long duration; and as soon as it was blown over, the wind blew off shore. At day-break we encountered new misfortunes; our N. W. cable parted; the hawser, which the Etoile had given us, and which held us by her stream-anchor, had the same fate a few minutes after. The frigate then swinging off to her S. E. anchor and hawser, was no more than a cable's length off shore, upon which the sea broke with great violence. In proportion, as the danger became more pressing, our resources failed us; the two anchors of which the cable's had just parted, were entirely lost to us; their buoys disappeared, being either sunk, or taken away, during the night, by the Indians. Thus we had loft already four anchors, in four and twenty hours, and had yet several losses to sustain.

At ten o'clock in the morning, the new cable we had bent to the anchor of two thousand seven hundred weight from the Etoile, which held us to the S. E. parted, and the frigate, riding by a single hawser, began to drive upon the coast. We immediately let go our sheet-anchor under foot; it being the only one which we had remaining at our bow: but of what use could it be to us? We were so close to the breakers, that we must have been upon them before we had veered

out cable sufficient to make the anchor catch hold in the ground. We expected every moment the sad conclusion of this adventure, when a S. W. breeze gave us some hopes of setting sail. Our jib and stay-sails were soon hoisted; the ship began to shoot a-head, and we were endeavouring to make sail, in order to veer away cable and hawser, and get out; but the wind almost immediately shifted to the eastward again. This interval had, however, given us time to take on board the end of a hawser, from a second stream-anchor of the Etoile, which she had just carried out to the eastward, and which saved us for this time. We hove in upon both hawsers, and got somewhat further from the shore. We then sent our long-boat aboard the Etoile, to help her in mooring her securely; her anchors happily lay in a bottom less covered with coral than that where we had let ours go. This being done, our long-boat went to weigh the anchor of 2700 weight by its buoy-rope; we bent another cable to it, and carried it out to the N. E. we then weighed the stream-anchor belonging to the Etoile, and returned it to her. During these two days M. de la Giraudais, captain of that store-ship, had a very great share in the preservation of the frigate, by the assistance which he gave me: it is with pleasure that I pay this tribute of gratitude to an officer, who has already been my companion on former voyages, and whose zeal equals his talents.

However, when the day appeared, no Indian was come near the camp, not a single periagua was seen sailing, all the neighbouring houses were abandoned, and the whole country appeared as a desert.

Peace made with the islanders.

The prince of Nassau, who with only four or five men was gone out a little further, in order to search for some of the natives, and to inspire them with confidence again, found a great number of them with Ereti, about a league from the camp. As soon as that chief knew the prince again, he came up to him with an air of consternation.

The women, who were all in tears, fell at his feet, kissed his hands, weeping and repeating several times, *Tayo, maté*, you are our friends, and you kill us. By his caresses and demonstrations of friendship, he at last succeeded in regaining their confidence. I saw from on board a croud of people running to our quarters: fowls, cocoa-nuts, and branches full of bananas, embellished this procession, and promised a peace. I immediately went ashore with an assortment of silk stuffs, and tools of all sorts; I distributed them among the chiefs, expressing my concern to them on account of the disaster which had happened the day before, and assuring them, that I would punish the perpetrators. The good islanders loaded me with caresses; the people applauded the reunion, and, in a short time, the usual croud and the thieves returned to our quarters, which looked like a fair. This day, and the following, they brought more refreshments than ever. They likewise desired to have several muskets fired in their presence, which frightened them very much, as all the creatures which we shot at were killed immediately.

The Etoile sets sail.

The boat, which I had sent to sound to the northward, was returned with the good news of having found a very fine passage. It was then too late to profit of it the same day; for night was coming on. Happily it passed quietly, both on shore and at sea. The 14th in the morning, wind at east, I ordered the Etoile, who had got her water and all her men on board, to weigh and go out by the new north passage. We could not go out by that passage before the store-ship, she being moored to the northward of us. At eleven she came to sail, from a hawser, which she had carried on board of us. I kept her long-boat and two small anchors; I likewise took on board, as soon as she was got under sail, the end of the cable of her S. E. anchor, which lay in a good

bottom. We now weighed our sheet-anchor, carried the two stream-anchors further out; and were by this means moored by two great, and three small anchors. At two o'clock in the afternoon, we had the satisfaction of seeing the Etoile without the reefs. Our situation by this means became less terrifying; we had at least secured to ourselves the means of returning to our country, by putting one of the ships out of danger. When M, de la Giraudais was got out into the offing, he sent back his boat to me, with Mr. Lavari Leroi, who had been employed to survey the passage.

Inscription buried.

We laboured all day, and a part of the night, to complete our water, and to remove the hospital and the camp. I buried near the shed, an act of taking possession, inscribed on an oak plank, and a bottle well corked and glued, containing the names of the officers of both ships. I have followed the same method in regard to all the lands discovered during the course of this voyage. It was two o'clock in the morning, before every one of our people were on board: the night was still stormy enough to give us some disturbance, notwithstanding the number of anchors we had moored.

The Boudeuse sets sail; runs new dangers.

On the 15th, at six o'clock in the morning, the wind blowing off shore, and the sky looking stormy, we weighed our anchor, veered away the cable of that which belonged to the Etoile, cut one of the hawsers, and veered out the other two, setting sail under our fore-sail and top-sails, in order to go out by the eastern passage. We left the two long-boats to weigh the anchors; and as soon as we were got out of the reefs, I sent the two barges armed, under the command of ensign the chevalier de Suzannet, to protect the work of the long-boats. We were about a quarter of a league off shore, and began to give ourselves joy of having so happily left an anchorage, that had given us such terrible alarms, when the wind ceasing all at once, the tide and a great swell from the eastward, began to drive us towards the reefs to leeward of the passage. The worst consequences of the shipwreck, with which we had hitherto been threatened, would have been to pass the remainder of our days on an isle adorned with all the gifts of nature, and to exchange the sweets of the mother country, for a peaceable life, exempted from cares. But now shipwreck appeared with a more cruel aspect; the ship being rapidly carried upon the rocks, could not have resisted the violence of the sea two minutes, and hardly some of the best swimmers could have saved their lives. At the beginning of the danger, I had made signal for the long boats and barges to return and tow us. They came at the very moment, when we being only 35 or 36 fathom (50 toises) from the reef, our situation was become quite desperate; the more so as we could not let go an anchor. A westerly breeze, springing up that instant, brought hope along with it; it actually freshened by degrees; and at nine o'clock in the morning, we were quite clear of all dangers.

Departure from Taiti; losses which we sustained there.

I immediately sent the boats back in quest of the anchors; and I remained plying to wait for them. In the afternoon we joined the Etoile. At five in the evening our long-boat came on board with the best bower, and the cable of the Etoile, which she carried to her: our barge, that of the Etoile, and her longboat returned soon after; the latter bringing us our stream-anchor and a hawser. As to the other two stream-anchors, the night coming on, and the sailors being extremely fatigued, they could not weigh them that day. I at first intended to keep plying off and on during night, and to send them out for them the next morning, but at mid-night a strong

gale sprung at E, N. E. obliging me to hoist in the boats, and make sail, in order to get clear of the coast.

Thus an anchorage of nine days cost us six anchors; which we should not have lost, had we been provided with some iron chains. This is a precaution which no navigator ought to forget, if he is going upon such a voyage as this.

Regret of the islanders at our departure.

Now that the ships are in safety, let us stop a moment to receive the farewell of the islanders. At daybreak, when they perceived us setting sail, Ereti leaped alone into the first periagua he could find on shore, and came on board. There he embraced all of us, held us some moments in his arms, shedding tears, and appearing much affected at our departure. Soon after, his great periagua came on board, laden with refreshments of all kinds; his wives were in the periagua; and with them the same islander, who, on the first day of our land-fall, had lodged on board the

One of them embarks with us, at his own and his nation's request.

Etoile. Ereti took him by the hand, and, presenting him to me, gave me to understand, that this man, whose name was Aotourou, desired to go with us, and begged that I would consent to it. He then presented him to each of the officers in particular; telling them that it was one of his friends, whom he entrusted with those who were likewise his friends, and recommending him to us with the greatest signs of concern. We made Ereti more presents of all sorts; after, which he took leave of us, and returned to his wives, who did not cease to weep all the time of the periaguas being along-side of us. In it there was likewise a young and handsome girl, whom the islander that stayed along with us went to embrace. He gave her three pearls which he had in his ears, kissed her once more; and, notwithstanding the tears of this young wife or mistress, he tore himself from her, and came aboard the ship. Thus we quitted this good people; and I was no less surprised at the sorrow they testified on our departure, than at their affectionate confidence on our arrival.

CHAP. III.

Description of the new island; manners and character of its inhabitants.

Lucis habitamus opacis, Riparumque toros & prata recentia rivia
Incolimus. VIRG. Æneid. Lib. VI.

Geographical position of Taiti.

THE isle which at first was called New Cythera, is known by the name of Taiti amongst its inhabitants. Its latitude has been determined in our camp, from several meridian altitudes of the sun, observed on shore with a quadrant. Its longitude has been ascertained by eleven observations of the moon, according to the method of the horary angles. M. Verron had made many others on shore, during four days and four nights, to determine the same longitude; but the paper on which he wrote them having been stolen, he has only kept the last observations, made the day before our departure. He believes their result exact enough, though their extremes differ among themselves 7^0 or 8° . The loss of our anchors, and all the accidents I have mentioned before, obliged us to leave this place much sooner than we intended, and have made it impossible for us to survey its coasts. The southern part of it is entirely unknown to us; that which we have observed from the S. E. to the N. W. point, seems to be fifteen or twenty leagues in extent, and the position of its principal points, is between N. W. and W. N. W.

Better anchorage than that where we were.

Between the S. E. point and another great cape advancing to the northward, about seven or eight leagues from the former, you see a bay open to the N. E. which has three or four leagues depth. Its shores gradually descend towards the bottom of the bay, where they have but little height, and seem to form the finest and best peopled district of the whole island. It seems it would be easy to find several good anchoring-places in this bay. We were very ill served by fortune in meeting with our anchorage. In entering into it by the passage where the Etoile came out at, M. de la Giraudais allured me, that between the two most northerly isles, there was a very safe anchorage for at least thirty ships; that there was from twenty-three to between twelve and ten fathom of water, grey sand and ooze; that there was a birth of a league in extent, and never any sea. The rest of the shore is high, and seems in general to be quite surrounded by a reef, unequally covered by the sea, and forming little isles in some parts, on which the islanders keep up fires at night on account of their fishery, and for the safety of their navigation some gaps from space to space form entrances to the part within the reefs, but the bottom must not be too much relied upon. The lead never brings up any thing but a grey sand; this sand covers great masses of hard and sharp coral, which can cut through a cable in one night, as fatal experience taught us.

Beyond the north point of this bay, the coast forms no creek, nor no remarkable cape. The most westerly point is terminated by a low ground, from which to the N. W. and at about a league's distance, you see a low isle, extending two or three leagues to the N. W.

Aspect of the country.

The height of the mountains in the interior parts of Taiti, is surprising in respect, to the extent of the island. Far from making its aspect, gloomy and wild, they serve only to embellish it, offering to the eye many prospects and beautiful landscapes, covered with the richest

productions of nature, in that beautiful disorder which it was never in the power of art to imitate. From thence spring a vast number of little rivulets, which greatly contribute to the fertility of the country, and serve no less to supply the wants of the inhabitants than to adorn and heighten the charms of the plains. All the flat country, from the sea-shore to the foot of the mountains, is destined for the fruit-trees, under which, as I have already observed before, the houses of the people of Taiti are built, without order, and without forming any villages. One would think himself in the Elysian fields: Public paths, very judiciously laid out, and carefully kept in a good condition form the most easy communication with every part of the country. The chief productions of the isle are [1] cocoa-nuts, plantains or bananas, the bread-fruit, yams, curassol, okras, and several other roots and fruits peculiar to the country: plenty of sugar-canes which are not cultivated, a species of wild indigo, a very fine red and a yellow substance for dying, of which I cannot say from whence they get them. In general, M. de Commerçon has found the same kinds of vegetables there as are common in India. Aotourou, whilst he was amongst us, knew and named several of our fruits and legumes, and a considerable number of plants, cultivated by the curious, in hot-houses. The wood which is fit for carpenters work grew on the mountains, and the islanders make little use of it; they only employ it for their great periaguas, which they make of cedar wood. We have likewise seen pikes of a black, hard and heavy wood among them, very like iron-wood. For building their common periaguas, they make use of the tree which bears the bread-fruit. This is a wood which will not split, but is so soft and full of gum, that it is only as it were bruised when worked with a tool. This isle, though abounding with very high mountains, does not seem to contain any minerals, since the hills are every where covered with trees and other plants. [2] At lead it is certain that the islanders do not know any metals.

1 The cocoa-nuts, or the fruit of the *cocos nutrifera*, Linn, is too well known to want any description. The plantains, or fruit of the *musa paradisiaca*, Linn, is likewise well known to all navigators, as the produce of hot countries.

The bread-fruit is a production of a tree not yet described by Dr. Linnaeus; Lord Anson found it upon the isle of Tinian; Dampier and the great Ray take notice of this very useful and curious tree. Yams are the roots of a plant known under the name of *dioscorea alata*. The okra is the fruit of the *hibiscus esculentus*, Linn. The curassol is one of the *annonas* or custard-apples. In general it must be observed that the botanical knowledge of our author is very superficial, and though he enumerates these fruits as the growth of the isle of Otahitee, it cannot be ascertained with any degree of precision, whether our author is right or wrong; and the new light in which, by the indefatigable industry of our philosophers, the natural history of these countries will be placed, makes us the more ardently wish for the publication of their great discoveries. F.

2 This assertion of Mr. de B. proves him to be little acquainted with mining; since our best writers on that subject give a gently sloping ridge of mountains, with a fine turf, covered with groves of trees, and well supplied with water, amongst many more, as the characteristics of a place where it is probable to find minerals in: See *Lehman's Art des Mines Metalliques*, vol. i. p. 17. But the whole isle of Otahitee seems to be produced by a Volcano, and the rocks on it are chiefly lava, consequently there are very little hopes of finding any regular veins with minerals on it, except some iron-stone, which has been liberally scattered by the benevolent hand of nature all over the various parts of the globe. F.

They give the same name of *aouri*, by which they asked us for iron, to all the kinds of metals we could shew them. But in what manner they became acquainted with iron, is not easily understood; however, I shall soon mention what I think on this subject.

I know of only a finale rich article of commerce, viz. very fine pearls. The wives and children of the chief people wear them at their ears; but they hid them during our stay amongst them. They make a kind of castanets of the shells of the pearl-oyster, and this is one of the instruments employed by their dancers.

Animals of the country.

We have seen no other quadrupeds than hogs, a small but pretty sort of dogs, and rats in abundance. The inhabitants have domestic cocks and hens, exactly like ours. We have likewise seen beautiful green turtle doves, large pigeons of a deep blue plumage and excellent taste, and a very small sort of perrokeets, very singular on account of the various mixture of blue and red in their feathers. The people feed their hogs and their fowls with nothing but plantains. Taking together what has been consumed by us on shore, and what we have embarked in both ships, we have in all got by our exchanges, upwards of eight hundred fowls, and near one hundred and fifty hogs; and if it had not been for the troublesome work on the last days, we should have got much more, for the inhabitants brought every day a greater quantity of them.

Meteorological observations.

We have not observed great heat in this island. During our stay, Reaumur's thermometer never rose above 22°, and was sometimes at 18°, but it may be observed that the sun was already eight or nine degrees on the other side of the equator. However, this isle has another inestimable advantage, which is that of not being infected by those myriads of troublesome

Goodness of the climate: vigour of the inhabitants.

insects that are the plague of other tropical countries: neither have we observed any venomous animals in it. The climate upon the whole is so healthy, that notwithstanding the hard work we have done in this island, though our men were continually in the water, and exposed to the meridian sun, though they slept upon the bare soil and in the open air, none of them fell sick there. Those of our men who were sent on shore because they were afflicted with the scurvy, have not passed one night there quietly, yet they regained their strength, and were so far recovered in the short space of time they staid on shore, that some of them were afterwards perfectly cured on board. In short, what better proofs can we desire of the salubrity of the air, and the good regimen which the inhabitants observe, than the health and strength of these same islanders, who inhabit huts exposed to all the winds, and hardly cover the earth which serves them as a bed with a few leaves; the happy old age to which they attain without feeling any of its inconveniences; the acuteness of all their senses; and lastly, the singular beauty of their teeth, which they keep even in the most advanced age?

Their nourishment.

Vegetables and fish are their principal food; they seldom eat flesh, their children and young girls never eat any; and this doubtless serves to keep them free from almost all our diseases. I must say the same of their drink; they know of no other beverage than water. The very smell of wine or brandy disgusted them; they likewise shewed their aversion to tobacco, spices, and in general to every thing strong.

There are two races of men in the isle.

The inhabitants of Taiti consist of two races of men, very different from each other, but speaking the same language, having the same customs, and seemingly mixing without distinction. The first, which is the most numerous one, produces, men of the greatest size; it is very common to see them measure six (Paris) feet and upwards in height. I never saw men better made, and whose limbs were more proportionate: in order to paint a Hercules or a Mars, one could no where find such beautiful models. Nothing distinguishes their features from those of the Europeans: and if they were cloathed; if they lived less in the open air, and were less exposed to the sun at noon, they would be as white as ourselves: their hair in general is black. The second race are of a middle size, have frizzled hair as hard as bristles, and both in colour and features they differ but little from mulattoes. The Taiti man, who embarked with us, is of this second race, though his father is chief of a district: but he possesses in understanding what he wants in beauty.

Account of some of their customs.

Both races let the lower part of the beard grow, but they all have their whiskers, and the upper part of the cheeks shaved. They likewise let all their nails grow, except that on the middle finger of the right hand. Some of them cut their hair very short, others let it grow, and wear it fastened on the top of the head. They have all got the custom of anointing or oiling it and their beard with cocoa-nut oil. I have met with only a single cripple amongst them; and he seemed to have been maimed by a fall. Our surgeon assured me, that he had on several of them observed marks of the small-pox; and I took all possible measures to prevent our people's communicating the other sort to them; as I could not suppose that they were already infected with it.

Their dress.

The inhabitants of Taiti are often seen quite naked, having no other clothes than a sash, which covers their natural parts. However, the chief people among them generally wrap themselves in a great piece of cloth, which hangs down to their knees. This is likewise the only dress of the women; and they know how to place it so artfully, as to make this simple dress susceptible of coquetry. As the women of Taiti never go out into the sun, without being covered, and always have a little hat, made of canes, and adorned with flowers, to defend their faces against its rays; their complexions are, of course, much fairer than those of the men. Their features are very delicate; but what distinguishes them is the beauty of their bodies, of which the *contour* has not been disfigured by a torture of fifteen years duration.

Whilst the women in Europe paint their cheeks red, those of Taiti dye their loins and buttocks of a deep blue. This is an ornament, and at the same time a mark of distinction. The men are subject to the same fashion. I cannot say how they do to impress these indelible marks, unless it is by puncturing the skin, and pouring the juice of certain herbs upon it, as I have seen it practiced by the natives of Canada. It is remarkable, that this custom of painting has always been found to be received among nations who bordered upon a state of nature. When Cæsar made his first descent upon England, he found this fashion established there; *omnes vero Britanni se vitro inficiunt, quod cæruleum efficit colorem.*

The learned and ingenious author of the *Recherches philosophiques sur les Americains*, [1] thinks this general custom owes its rise to the necessity of defending the body from the puncture of insects, multiplying beyond conception in uncultivated countries. This cause, however, does not exist at Taiti, since, as we have already said above, the people there are not troubled with such unsupportable insects. The custom of painting is accordingly a mere fashion, the same as at Paris. Another custom at Taiti, common to men and women, is, to pierce their ears, and to wear in them pearls or flowers of all sorts. The greatest degree of cleanliness further adorns this amiable nation; they constantly bathe, and never eat nor drink without washing before and after it.

Interior policy.

The character of the nation, has appeared mild and beneficent to us. Though the isle is divided into many little districts, each of which has its own master, yet there does not seem to be any civil war, or any private hatred in the isle. It is probable, that the people of Taiti deal amongst each other with unquestioned sincerity. Whether they be at home or no, by day or by night, their houses are always open. Every one gathers, fruits from the first tree he meets with, or takes some in any house into which he enters. It should seem as if, in regard to things absolutely necessary for the maintenance of life, there was no personal property amongst them, and that they all had an equal right to those articles. In regard to us, they were expert thieves; but so fearful, as to run away at the least menace. It likewise appeared, that the chiefs disapproved of their thefts, and that they desired us to kill those who committed them. Ereti, however, did not himself employ that severity which he recommended to us. When we pointed out a thief to him, he himself pursued him as fast as possible; the man fled; and if he was overtaken, which was commonly the case, for Ereti was indefatigable in the pursuit, some lashes, and a forced restitution of the stolen goods, was all the punishment inflicted on the guilty. I at first believed they knew of no greater punishment; for when they saw that some of our people were put in irons, they expressed great concern for them; but I have since learnt, that they have undoubtedly the custom of hanging thieves upon trees, as it is practiced in our armies.

They are at war with the neighbouring islands.

They are almost constantly at war with the inhabitants of the neighbouring isles. We have seen the great periaguas, which they make use of to make descents, and even in sea-fights. Their arms are the bow, the fling, and a kind of pike of a very hard wood. They make war in a very cruel manner. According to Aotourou's information, they kill all the men and male children taken in battle; they strip the skins, with the beards from the chins, and carry them off as trophies of their victory, only preserving the wives and daughters of their enemies, whom the conquerors do not disdain to admit to their bed. Aotourou himself is the son of a chief of Taiti, and of a captive woman from the isle of Oopoa, which is near Taiti, and often at war with its inhabitants. To this mixture I attribute the difference of the races we have observed among them. I am not acquainted with their method of healing wounds: our surgeons admired the scars which they saw.

I shall, towards the end of this chapter, give an account of what I have been able to discover, concerning their form of government, the extent of the power of their petty sovereigns, the kind of distinction existing between the men of note and the common people; and, lastly, the ties which unite together, under the same authority, this multitude of robust men, whose wants are so few.

1 Supposed to be the marquis de Pau. F.

Important customs.

I shall only observe here, that in matters of consequence, the lord of the district does not give his decision without the advice of a council. I have mentioned above, that a deliberation of the people of note in the nation was required on the subject: of our establishing a camp on shore. I must add too, that the chief seems to be implicitly obeyed by every body; and that the men of note have likewise people to serve them, and over whom they have an authority.

Customs on the subject of their dead.

It is very difficult to give an account of their religion. We have seen wooden statues among them, which we took for idols; but how did they worship them? The only religious ceremony, which we have been witnesses to, concerns the dead. They preserve their corpses a long while, extended on a kind of scaffold, covered by a shed. The infection which they spread does not prevent the women from going to weep around the corpse, during part of the day, and from anointing the cold relics of their affection with cocoa-nut oil. Those women, with whom we were acquainted, would sometimes allow us to come near these places, which are consecrated to the manes of the deceased? they told us *emoé* he sleeps. When nothing but the skeletons remain, they carry them into their houses, and I do not know how long they keep them there. I only know, because I have seen it, that then a man of consideration among the people comes to exercise his sacred rites there; and that in these awful ceremonies, he wears ornaments which are much in request.

We have asked Aotourou many questions concerning his religion; and believe, we understood that, in general his countrymen are very superstitious; that the priests have the highest authority amongst them; that besides a superior being, named *Eri-t-Era*, king of the sun or of light, and whom they do not represent by any material image, they have several divinities some beneficent, others mischievous; that the name of these divinities or genii is *Eatoua*; that they suppose, that at each important action of human life, there presides a good and an evil genius; and that they decide its good or bad success. What we understand with certainty is, that when the moon has a certain aspect, which they call *Malama tamai*, or moon in state of war, [1] (an aspect in which we have not been able to distinguish any characteristic mark, by which it could be defined) they sacrifice human victims. Of all their customs, one which most surprised me, is that of saluting those who sneeze by saying, *Evaroua-t-eatoua*, that the good *eatoua* may awaken thee, or that the evil *eatoua* may not lull thee asleep. These are marks which prove, that they have the same origin with the people of the old continent. Upon the whole, scepticism is reasonable, especially when we treat of the religion of different nations; as there is no subject in which it is more easy to be deceived by appearances.

Polygamy seems established amongst them; at least it is so amongst the chief people. As love is their only passion, the great number of women is the only luxury of the opulent. Their children are taken care of, both by their fathers and their mothers. It is not the custom at Taiti, that the men occupied only with their fishery and their wars, leave to the weaker sex the toilsome works of husbandry and agriculture. Here a gentle indolence falls to the share of the women; and the endeavours to please, are their most serious occupation. I cannot say whether their marriage is a civil contract, or whether it is consecrated by religion; whether, it is indissoluble, or subject to the laws of divorce. Be this as it will, the wives owe their husbands a blind submission; they would wash with their blood any infidelity committed without their husbands' consent.

1 *Lune en etat de Guerre.*

That, it is true, is easily obtained; and jealousy is so unknown a passion here, that the husband is commonly the first who persuades his wife to yield to another. An unmarried woman suffers no constraint on that account; every thing invites her to follow the inclination of her heart, or the instinct of her sensuality; and public applause honours her defeat: nor does it appear, that how great soever the number of her previous lovers may have been, it should prove an obstacle to her meeting with a husband afterwards. Then wherefore should she resist the influence of the climate, or the seduction of examples? The very air which the people breath; their songs, their dances, almost constantly attended with indecent postures, all conspire to call to mind the sweets of love, all engage to give themselves up to them. They dance to the sound of a kind of drum, and when they sing they accompany their voices with a very soft kind of flute, with three or four holes, which; as I have observed above, they blow with their nose. They like-wise practice a kind of wrestling; which, at the same time, is both exercise and play to them.

Character of the islanders.

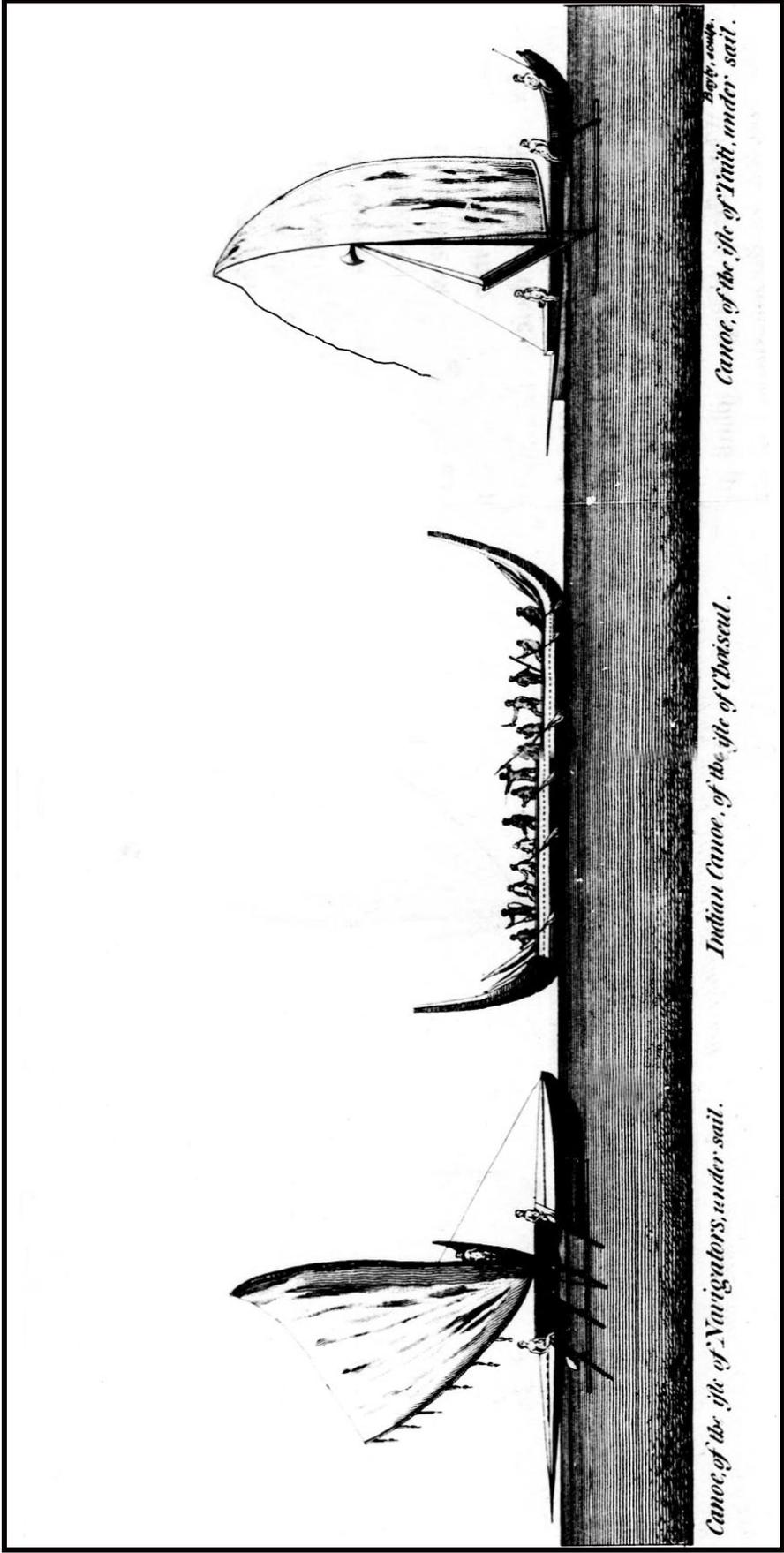
Thus accustomed to live continually immersed in pleasure, the people of Taiti have acquired a witty and humorous temper, which is the offspring of ease and of joy. They likewise contracted from the same source a character of fickleness, which, constantly amazed us. Every thing strikes them, yet nothing fixes their attention: amidst all the new objects, which we presented to them, we could never succeed in making them attend for two minutes together to any one. It seems as if the least reflection is a toilsome labour for them, and that they are still more averse to the exercises of the mind, than to those of the body.

Account of some of their works.

I shall not, however, accuse them of want of understanding Their skill and ingenuity in the few necessary instances of industry, which notwithstanding the abundance of the country, and the temperature of the climate they cannot dispense with, would be sufficient to destroy such assertion. It is amazing with how much art their fishing tackle is contrived; their hooks are made of mother-of-pearl, as neatly wrought as if they were, made by the help of our tools; their nets are exactly like ours; and knit with threads, taken from the great American *Aloes*. We admired the construction of their extensive houses, and the disposition of the leaves of the *Thatch-palm*, with which they are covered.

Construction of their boats.

They have two sorts of periaguas; some are little, and, without much ornament; being made of a single stem of a tree hollowed out; the others are much larger, and wrought with much art. A hollow tree forms the bottom of the periagua; from the head, to two-thirds of the intended length, another tree forms the back part, which is bent, and greatly elevated; in so much, that the extremity of the stern rises five or six feet above the water. These two pieces are joined together, as an arch of a circle; and as they have no nails to fasten them together with, they pierce the extremity of both pieces in several places, and by the means of strings, (made of the filaments which surround cocoa-nuts) they tie them together. The sides of the periagua are raised by two boards, about one foot broad, sewed to the bottom, and to each other, with the preceding sort of strings. They fill the seams with the fibrous substance round cocoa-nuts; but do not cover or pay them with any coating. A plank, which covers the head of the periagua, and projects about five or six feet beyond it, prevents its plunging entirely into the water, when there is a great sea. To make these light boats less subject to upset, they fix an out-rigger to one of its sides. This is nothing more than a pretty long piece of wood, supported by two cross



Canoe of the Isle of Navigators, under sail.

Indian Canoe, of the Isle of Bourbon.

Canoe of the Isle of Titi, under sail.

pieces, of about four or five feet in length; the other end of which is fastened to the periagua. When she is sailing, a plank projects along the side, opposite to the out-rigger; a rope is fastened to it, which supports the mast, and it likewise makes the periagua stiffer, by placing a man or a weight at the end of the plank.

Their ingenuity appears still more to advantage in the means they employ to render these vessels proper to transport them to the neighbouring isles, with which they have a communication, having no other guides than the stars on such navigations. They fasten two great periaguas together alongside of each other, (leaving about four feet distance between them) by means, of some cross pieces of wood tied very fast to the starboard of one and larboard of the other boat. Over the stern of these two vessels thus joined, they place a hut, of a very light construction, covered by a roof of reeds. This apartment shelters them from the sun and rain, and at the same time affords them a proper place for keeping their provisions dry. These double periaguas can contain a great number of persons, and are never in danger of oversetting. We have always seen the chiefs make use of them; they are navigated both by a sail and by oars, as the single periaguas: the sails are composed of mats, extended on a square frame, formed by canes, of which one of the angles is rounded.

The Taiti people have no other tool for all these works than a chissel, the blade of which is made of a very hard black stone. [1] It is exactly of the same form as that of our carpenters, and they use it with great expertness: they use very sharp pieces of shells to bore holes into the wood.

Their cloths.

The manufacturing of that singular cloth, of which their dress is made up, is likewise one of their greatest arts. It is prepared from the rind of a shrub, which all the inhabitants cultivate around their houses. A square piece of hard wood, fluted on its four sides by furrows of different sizes, is made use of in beating the bark on a smooth board: they sprinkle some water on it during this operation, and thus they at last form a very equal fine cloth, of the nature of paper, but much more pliable, and less apt to be torn; to which they give a great breadth. They have several sorts of it, of a greater or less thickness, but all manufactured from the same substance: I am not acquainted with their methods of dyeing them.

1 The stone employed by the inhabitants of Otahitee for chissels and other tools, and even for ornaments to be hung in the ears, is by all appearances a kind of *lapis nephriticus*, which when transparent is pale-green, very soft, and employed for the latter purpose; but when opaque, it is of a deeper hue and harder. In South America the same kind of stone is employed by the natives for ornaments; and is much valued among the *Topayos*, or Tapuyas, a nation in the interior parts of Brasil, living along the river of that name, which falls into the river Amazons.

This stone is called *tapuravas* by the Galibis, a nation in Guiana; the Europeans settled in these parts of the world, call it the *Amazon's-stone*; the European jewellers think it to be a *jade*, a kind of precious stone of that same colour brought from the east. It is said that stones of this kind are found near the river St. Jago, forty miles from Quito, in the province of las Esmeraldas, in Peru. They grow more and more scarce, being much coveted by the nations of Guiana, the Tapuyas, and some other Indian nations, and likewise frequently bought up by the Europeans. BARRERE *Nouvelle Relation de la France equinoxiale*, Paris 1743, and CONDAMINE *Relation abregée d'un Voyage fait en descendant la Riviere des Amazones*, Paris 1746. F.

Account of the Taiti-man, whom I brought to France.

I Shall conclude this chapter in exculpating myself, for people oblige me to use this word, for having profited of the good will of Aotourou, and taken him on a voyage, which he certainly did not expect to be of such a length; and likewise, in giving an account of the information he has given me concerning his country, during the time that he has been with me.

Reasons for which I took him.

The zeal of this islander to follow us was unfeigned. The very first day of our arrival at Taiti, he manifested it to us in the most expressive manner, and the nation seemed to applaud his project. As we were forced to sail through an unknown ocean, and sure to owe all the assistance and refreshments on which our life depended, to the humanity of the people we should meet with, it was of great consequence to us to take a man on board from one of the most considerable islands in this ocean. It was to be supposed that he spoke the same language as his neighbours, that his manners were the same, and that his credit with them would be decisive in our favour, when he should inform them of our proceedings towards his countrymen, and our behaviour to him. Besides, supposing our country would profit of an union with a powerful people, living in the middle of the finest countries in the world, we could have no better pledge to cement such an alliance, than the eternal obligation which we were going to confer on this nation, by sending back their fellow-countryman well treated by us, and enriched by the useful knowledge which he would bring them. Would to God that the necessity and the zeal which inspired us, may not prove fatal to the bold Aotourou!

His stay at Paris.

I have spared neither money nor trouble to make his stay at Paris agreeable and useful to him. He has been there eleven months, during which he has not given any mark at all of being tired of his stay. The desire of seeing him has been very violent; idle curiosity, which has served only to give false ideas to men whose constant practice it is to traduce others, who never went beyond the capital, never examine any thing, and who being influenced by errors of all sorts, never cast an impartial eye upon any object, and yet pretend to decide with magisterial severity, and without appeal! How, said some of them to me, in this man's country the people speak neither French, nor English, nor Spanish? What could I answer them? I was Struck dumb; however, it was not on account of the surprize at hearing such a question asked. I was used to them, because I knew that at my arrival, many of those who even pass for people of abilities, maintained that I had not made the voyage round the world, because I had not been in China. Some other sharp critics conceived and propagated a very mean idea of the poor islander, because, after a stay of two years amongst Frenchmen, he could hardly speak a few words of the language. Do not we see every day, said they, that the Italians, English, and Germans learn the French in so short a time as one year at Paris? I could have answered them perhaps with some reason, that, besides the physical obstacle in the organs of speech of this islander, (which shall be mentioned in the sequel) which prevented his becoming conversant in our language, he was at least thirty years old; that his memory had never been exercised by any kind of study, nor had his mind ever been at work; that indeed an Italian, an Englishman, a German could in a year's time speak a French jargon tolerably well, but that was not strange at all, as these strangers had a grammar like ours, as their moral, physical, political, and social ideas were the same with ours, and all expressed by certain, words in their language as they are in French; that they had accordingly no more than a translation to fix in their memory, which had been exerted from their very infancy. The Taiti-man, on the contrary, only having a small number of ideas,

relative on the one hand to a most simple and most limited society, and on the other, to wants which are reduced to the smallest number possible; he would have been obliged, first of all, as I may say, to create a world of previous ideas, in a mind which is as indolent as his body, be after a stay of two years amongst Frenchmen, he could hardly speak a few words of the language. Do not we see every day, said they, that the Italians, English, and Germans learn the French in so short a time as one year at Paris? I could have answered them perhaps with some reason, that, besides the physical obstacle in the organs of speech of this islander, (which shall be mentioned in the sequel) which prevented his becoming conversant in our language, he was at least thirty years old; that his memory had never been exercised by any kind of study, nor had his mind ever been at work; that indeed an Italian, an Englishman, a German could in a year's time speak a French jargon tolerably well, but that was not strange at all, as these strangers had a grammar like ours, as their moral, physical, political, and social ideas were the same with ours, and all expressed by certain, words in their language as they are in French; that they had accordingly no more than a translation to fix in their memory, which had been exerted from their very infancy. The Taiti-man, on the contrary, only having a small number of ideas, relative on the one hand to a most simple and most limited society, and on the other, to wants which are reduced to the smallest number possible; he would have been obliged, first of all, as I may say, to create a world of previous ideas, in a mind which is as indolent as his body, be after a stay of two years amongst Frenchmen, he could hardly speak a few words of the language. Do not we see every day, said they, that the Italians, English, and Germans learn the French in so short a time as one year at Paris? I could have answered them perhaps with some reason, that, besides the physical obstacle in the organs of speech of this islander, (which shall be mentioned in the sequel) which prevented his becoming conversant in our language, he was at least thirty years old; that his memory had never been exercised by any kind of study, nor had his mind ever been at work; that indeed an Italian, an Englishman, a German could in a year's time speak a French jargon tolerably well, but that was not strange at all, as these strangers had a grammar like ours, as their moral, physical, political, and social ideas were the same with ours, and all expressed by certain, words in their language as they are in French; that they had accordingly no more than a translation to fix in their memory, which had been exerted from their very infancy. The Taiti-man, on the contrary, only having a small number of ideas, relative on the one hand to a most simple and most limited society, and on the other, to wants which are reduced to the smallest number possible; he would have been obliged, first of all, as I may say, to create a world of previous ideas, in a mind which is as indolent as his body, before he could come so far as to adapt to them the words in our language, by which they are expressed. All this I might perhaps have answered: but this detail required some minutes of time, and I have always observed, that, loaded with questions as I was, whenever I was going to answer, the persons that had honoured me with them were already far from me. But it is common in a capital to meet with people who ask questions, not from an impulse of curiosity, or from a desire of acquiring knowledge, but as judges who are preparing to pronounce their judgment; and whether they hear the answer or no, it does not prevent them from giving their decision. [1]

1 Though our author has strongly pleaded in this paragraph in behalf of Aotourou, it cannot, however, be denied that he was one of the most stupid fellows; which not only has been found by Englishmen who saw him at Paris, during his stay there, and whose testimony would be decisive with the public, were I at liberty to name them; but the very countrymen of Aotourou were, without exception, all of the same opinion, that he had very moderate parts, if any at all. F.

However, though Aotourou could hardly blabber out some words of our language, yet he went out by himself every day, and passed through the whole town without once missing or losing his way. He often made some purchases, and hardly ever paid for things beyond their real value. The only shew which pleased him, was the opera, for he was excessively fond of dancing. He knew perfectly well upon what days this kind of entertainment was played; he went thither by himself, paid at the door the same as every body else, and his favourite place was in the galleries behind the boxes. [1] Among the great number of persons who have been desirous of seeing him, he always distinguished those who were obliging towards him, and his grateful heart never forgot them. He was particularly attached to the duchess of Choiseul, who has loaded him with favours, and especially shewed marks of concern and friendship for him, to which he was infinitely more sensible than to presents. Therefore, he would, of his own accord, go to visit this generous benefactress as often as he heard that she was come to town.

His departure from France. Steps taken to send him home.

He left Paris in March, 1770, and embarked at Rochelle, on board the *Brisson*, which was to carry him to the Isle de France. During this voyage he has been trusted to the care of a merchant, who went a passenger in the same ship, which he had equipped in part. The ministry have sent orders to the governor and the intendant of the Isle of France, to send Aotourou home to his isle from thence. I have given a very minute account of the course that must be taken in order to go thither, and thirty-six thousand francs, (about fifteen hundred pounds sterling) which is the third part of my whole fortune, towards the equipment of the ship intended for this navigation. The duchess of Choiseul has been so humane as to consecrate a sum of money for bringing to Taiti a great number of the most necessary tools, a quantity of seeds, and a number of cattle; and the king of Spain has been pleased to permit that this ship might, if necessary, touch at the Philippines. O may Aotourou soon see his countrymen again!—I shall now give an account of what I have learnt in my conversations with him, concerning the customs of his country.

Farther accounts of the customs of Taiti.

I have already observed that the Taiti people acknowledge a supreme Being, who cannot be represented by any factitious image, and inferior divinities of two classes, represented by wooden figures. They pray at sun-rise and at sun-set; but they have besides a great number of superstitious practices, in order to conciliate the influence of the evil genii. The comet, visible at Paris in 1769, and which Aotourou has very well taken notice of, has given me an opportunity of learning that the people of Taiti know this kind of stars, which do not appear again, as Aotourou said, till after a great number of moons. They call comets *eveiou-eave*, and do not combine any sinister ideas with their apparition. Those meteors, however, which are here called shooting stars, are known to the people of Taiti by the name of *epao*, and are by them thought to be evil genii *eatoua toa*.

The better instructed people of this nation (without being astronomers, as our gazettes have pretended) have, however, a name for every remarkable constellation; they know their diurnal motion, and direct their course at sea by them, from isle to isle.

1 In the French theatre there is, in the door of each box, a small window or hole, where people may peep through, which made it possible to Aotourou to enjoy even in the galleries the sight of the dancers. F.

In these navigations, which sometimes extend three hundred leagues, they lose all sight of land. Their compass is the sun's course in day-time, and the position of the stars during the nights, which are almost always fair between the tropics.

Neighbouring isles.

Aotourou has mentioned several isles to me; some of which are allies of, and others at war with Taiti. The friendly isles are Aimeo, Maoroua, Aca, Oumaitia, and Tapouamassu. The enemies isles are Papara, Aiatea, Otaa, Toumaraa, Oopoa. These isles are as big as Taiti.

The isle of Pare, which is very abundant in pearls, is sometimes in alliance, and sometimes at war with Taiti. Enoua-motou, and Toupai, are two little uninhabited isles, abounding with fruits, hogs, fowls, fish, and turtle; but the people believe, that they are the habitation of the genii; they are their domains; and unhappy are the boats which chance or curiosity has conducted to these sacred isles. Almost all those, who endeavour to land there, must lose their lives in the attempt. These isles ly at different distances from Taiti. The greatest distance, which Aotourou mentioned to me, was fifteen days sail. It was, doubtless, about the same distance that he supposed our country was at, when he resolved to go with us.

Inequality of ranks.

I have mentioned above, that the inhabitants of Taiti seemed to live in an enviable happiness. We took them to be almost equal in rank amongst themselves; or at least enjoying a liberty, which was only subject to the laws established for their common happiness. I was mistaken; the distinction of ranks is very great at Taiti, and the disproportion very tyrannical. The kings and grandees have power of life and death over their servants and slaves, and I am inclined to believe, they have the same barbarous prerogative with regard to the common people, whom they call *Tata-einou*, vile men; so much is certain, that the victims for human sacrifices are taken from this class of people. Flesh and fish are reserved for the tables of the great; the commonalty live upon mere fruits and pulse. Even the very manner of being lighted at night, shews the difference in the ranks; for the kind of wood, which is burnt for people of distinction, is not the same with that which the common people are allowed to make use of. Their kings, alone, are allowed to plant before their houses, the tree which we call the *Weeping-willow*, or *Babylonian-willow*. [1] It is known, that by bending the branches of this tree, and planting them in the ground, you can extend its shadow as far as you will, and in what direction you please; at Taiti, their shade affords the dining-hall of their kings.

The grandees have liveries for their servants. In proportion as the master's rank is more or less elevated, their servants wear their sashes more or less high. This sash is fastened close under the arms, in the servants of the chiefs, and only covers the loins in those belonging to the lowest class of nobility. The ordinary hours of repast, are when the sun passes the meridian, and when he is set. The men do not eat with the women; the latter serving up the dishes, which the servants have prepared.

Custom of going into mourning.

At Taiti they wear mourning regularly, and call it *eeva*. The whole nation wear mourning for their kings. The mourning for the fathers is very long. The women mourn for their husbands; but the latter do not do the same for them. The marks of mourning, are a head-dress of feathers; the colour of which is consecrated to death, and a veil over the face.

1 *Arbre du Grand Seigneur*,

When the people in mourning go out of their houses, they are preceded by several slaves, who beat the castanets in a certain cadence; their doleful sound gives every body notice to clear the way, whether out of respect for the grief of the persons in mourning, or because meeting them is feared as an unlucky and ominous accident. However at Taiti, as in every other part of the world, the most respectable customs are abused; Aotourou told me, that this practice of mourning was favourable to the private meetings; doubtless, as I believe, of lovers with wives, whose husbands are not very complaisant. The instrument, whose sound disperses every body, and the veil which covers the face, secure to the lovers both secrecy and impunity.

Reciprocal assistance in their diseases.

In all diseases, which are any way dangerous, all the near relations assemble in the sick person's house. They eat and sleep there as long as the danger lasts; every one nurses him, and watches by him in his turn. They have likewise the custom of letting blood; but this operation is never performed at the foot or arm. A *Taoua*, i. e. a doctor, or inferior priest, strikes with a sharp piece of wood on the cranium of the patient; by this means he opens the *sagittal* vein; and when a sufficient quantity of blood is run out, he surrounds the head with a bandage, which shuts up the opening; the next day he washes the wound with water.

This is all that I have learnt concerning the customs of this interesting country, both upon the spot, and from my conversations with Aotourou. At the end of this work I shall add a Vocabulary of as many Taiti words as I could collect. When we arrived at this island, we observed that some of the words pronounced by the islanders stood in the vocabulary at the end of Le Maire's Voyage, under the name of Vocabulary of Cocos island. Indeed those islands, according to Le Maire and Schouten's reckoning, cannot be far from Taiti, and perhaps may be some of those which Aotourou named to me. The language of Taiti is soft, harmonious, and easy to be pronounced; its words are composed of almost mere vowels, without aspirates. [1] You meet with no nasal, nor no mute and half sounded syllables, nor that quantity of consonants, and of articulations which render some languages so difficult. Therefore our Taiti-man could never learn to pronounce the French. The same reasons for which our language is accused of not being very musical, rendered it inaccessible to his organs. It would have been easier to make him pronounce Spanish or Italian.

M. Pereire, celebrated for his art of teaching people, who are born deaf and dumb, to speak and articulate words, has examined Aotourou several times, and has found that he could not naturally pronounce most of our consonants, nor any of our nasal vowels. M. Pereire has been so obliging as to communicate to me a memoir on this subject. Upon the whole, the language of this island is abundant enough; I think so, because Aotourou, during the course of the voyage, pronounced every thing that struck him in rhythmic stanzas. It was a kind of blank verse, which he spoke extempore. These were his annals; and it seems as if his language furnished him with expressions sufficient to describe a number of objects unknown to him. We further heard him pronounce every day such words as we were not yet acquainted with; and he likewise spoke a long prayer, which he calls the prayer of the kings, and of all the words that compose it, I do not understand ten.

I learnt from Aotourou, that about eight months before our arrival at his island, an English ship had touched there.

1 The contrary, of the last mentioned circumstance, has been observed by our English navigators; and it is therefore highly probable Mr. de B. picked up his vocabulary of words from Aotourou, who had an impediment in his speech. F.

It is the same which was commanded by Mr. Wallace. The same chance by which we have discovered this isle, has likewise conducted the English thither, whilst we lay in Rio de la Plata. They stayed there a month; and, excepting one attack of the islanders, who had conceived hopes of taking the ship, every thing has passed very friendly between them. From hence, doubtless, proceeds the knowledge of iron, which we found among the natives of Taiti, and the name of *aouri*, by which they call it, and which sounds pretty like the English word *iron*. I am yet ignorant, whether the people of Taiti, as they owe the first knowledge of iron to the English, may not likewise be indebted to them for the venereal disease, which we found had been naturalized amongst them, as will appear in the sequel.

CHAP IV

Departure from Haiti; discovery of other islands; navigation to our clearing the great Cyclades.

OUR touching at Taiti has been productive of good, and of disagreeable consequences; danger and alarms followed all our steps to the very last moments of our stay; yet we considered this

1768. April.

country as a friend, whom we must love with all his faults. On the 16th of April, at eight o'clock in the morning, we were about ten leagues N. E. by N. of the north point of the island, and from hence I took my departure. At ten o'clock we perceived land to leeward, seeming to form three isles, and we were still in sight of Taiti.

Sight of Oumaitia.

At noon we plainly saw, that what we had taken for three isles, was no more than a single one, whose eminences had appeared as separate isles at a distance. Beyond this new land, we thought we saw another at a greater distance. This isle is of a middling height, and covered with trees; it may be seen at sea, about eight or ten leagues distant, Aotourou called it Oumaitia. He gave us to understand, in a manner which admitted of no doubt, that it was inhabited by a nation allied to his, that he had been there several times, that he had a mistress there, and that we should meet with the same reception and refreshments there as at Taiti.

Direction of the course.

We lost sight of Oumaitia this day, and I directed my course so as to avoid the Pernicious Isles, which we were taught to shun, by the disasters of admiral Roggewein, Two days afterwards, we had an incontestable proof, that the inhabitants of the isles in the Pacific Ocean communicate with each other, even at considerable distances. The night was very fair, without a single cloud, and all the stars shone very bright. Aotourou, after attentively observing them, pointed at the bright star in Orion's shoulder, saying, we should direct our course upon it; and that in two days time we should find an abundant country, which he well knew, and where he had friends: we even believed his gestures meant that he had a child there. As I did not alter my course, he repeated several times, that there were cocoa-nuts, plantains, fowls, hogs, and above all, women, whom by many expressive gestures he described as very complaisant. Being vexed that these reasons did not make any impression upon me, he ran to get hold of the wheel of the helm, the use of which he had already found out, and endeavoured in spite of the helm's-man to

change it, and steer directly upon the star, which he pointed at. We had much ado to quiet him, and he was greatly vexed at our refusal. The next morning, by break of day, he climbed up to the top of the mast, and stayed there all the morning, always looking towards that part where the land lay, whither he intended to conduct us, as if he had any hopes of getting sight of it. He had likewise told us that night, without any hesitation, all the names which the bright stars that we pointed at, bear in his language. We have since been assured with certainty, that he knows the phases of the moon perfectly well, and is well acquainted with different prognosticks, which often give notice to navigators of the changes of weather that are to happen at sea some time after. One of the opinions of these people, which Aotourou made very intelligible to us is, that they positively believe that the sun and moon are inhabited. What Fontenelle taught, them the plurality of worlds?

During the latter end of April we had very fine weather, but not much wind, and the easterly winds kept more to the northward than southward. On the night between the 26th and 27th, our pilot of the coast of France died suddenly of an apoplexy. These pilots generally are called coasting pilots, [1] and all the king's ships have a pilot of the coast of France. [2] They differ from those of the crew who are called pilots, and under-pilots, or pilot's boys.[3] The world has a very inaccurate idea of the functions which these pilots exercise on board our ships. They are generally thought to be the persons who direct the course, and who serve as a staff and support to the blind. I know not whether there is still any nation where they leave the art of piloting, that essential part of navigation, to those subaltern people. In our ships, the business of the pilot is to take care that the helmsman exactly follows the course, for which the captain alone gives the orders, to mark down all the alterations of the course that happen, either in consequence of the changes of winds, or of the orders of the commander, and likewise to observe the signals; nor have they the care of all these particulars, but under the direction of the officer of the watch. The superior officers of the king's navy certainly know more of geometry, even at leaving school, than is necessary to have a perfect knowledge of all the laws of pilotage. The class of pilots, properly so called, are moreover charged with the care of the common and azimuth compasses, of the log and sounding lines, of the lanthorns, the colours, &c. and it is plain, that these particulars require nothing more than exactness. Nor was my master-pilot above twenty years old, the second pilot was of the same age, and the pilots boys [4] were making their first voyage.

Astronomical observations.

My reckoning compared twice during this month, with M. Verron's astronomical observations, differed, the first time, and that was at Taiti, only 13' 10", which I was more to the westward. The second time, which was the 27th at noon, 1° 13' 37", which I was to the eastward of the

Second division of isles.

observation. The different isles discovered during this month, form the second division of isles in this vast ocean; I named them Archipelago of Bourbon.

The third of May, almost at day-break, we discovered more land to the north west, about ten or twelve leagues off. The wind was north easterly, and I gave orders to stand to windward of the north point of the land, which was very high, intending to reconnoitre it.

1 Pilotes-côtiers, 2 Pilote-pratique de la côte de France. 3 Pilotes, Aide- Pilotes, ou Pilotins. 4 Aides-pilotes.

Sight of new islands.

The nautical knowledge of Aotourou did not extend to these places, for his first idea when he saw this land, was, that it was our country. During the day we had some squalls, followed by calms, rain, and westerly breezes, such as are observed in this ocean at the approach of the least land. Before sun-set we distinguished three isles, one of which was much more considerable than the others. During the night, which happened to be moon-light, we kept sight of the land; we stood in for it the next day, and ranged the eastern shore of the greater isle, from its south to its north point; that was its longest side, being about three leagues long. The isle extends two leagues east and west. Its shores are every where deep, and the whole isle is as it were nothing more than a high mountain, covered with trees up to its summit, without either vallies or plains. The sea broke very violently upon the shore. We saw fires on the island, some huts covered with reeds, and terminating in a point, built under the shadow of cocoa-trees, and about thirty men running along the sea shore. The two little isles bear W. N. W. corrected, and one league distant from the great one, and have likewise the same situation among themselves. A narrow arm of the sea separates them, and at the W. point of the westernmost isle, there is a small isle or key. Each of the above two is not more than half a league long, and their shores are equally high and steep.

Exchanges made with the islanders.

At noon I made sail to pass between the little isles and the great one, when the sight of a periagua coming towards us, made me-bring to. She approached within pistol shot of the ship, but none of her people would come on board, notwithstanding all the signs of friendship which we could possibly invent and give to five men who conducted her. They were naked, excepting their natural parts, and shewed us cocoa-nuts and roots. Our Taiti-man stripped naked as they were, and spoke his language to them, but they did not understand him: they are no more of the same nation here. Being tired to see that they did not venture to come nearer, notwithstanding the desire they expressed of having several trifles which were displayed to them, I hoisted out the pinnace. As soon as they saw her, they made all the haste they could to get off, and I would not pursue them. Soon after we saw several other periaguas arrive, some of them under sail. They seemed less mistrustful than the former one, and came near enough to make exchanges, though none of them would come on board. We got from them yams, cocoa-nuts, a water hen of a superb plumage, and some pieces of a very fine shell. One of them had a cock which he would never exchange. They likewise brought stuffs of the same make as those of Taiti, but much coarser, and died with ugly red, brown, and black colours; bad fish hooks, made of the bones of fish, some mats, and some lances, six feet long, made of a kind of wood which was hardened in the fire. They did not choose to have any iron: they preferred little bits of red stuffs to nails, knives, and ear-rings, which had had so great a success at Taiti; I do not believe that these men are so gentle as those of Taiti; their features were more savage, and we were always obliged to be upon our guard against their cunning tricks to cheat us by their barter.

Description of these islanders.

These islanders appeared to be of a middle size, but active and nimble. They paint their breast and their thighs, almost down to the knee, of a dark blue; their colour is bronzed; but we observed one man among them who was much whiter than the rest. They shave or tear out their beards, and only one of them wore a pretty long one. They all had black hair, which stood upright on the head.

Description of their periaguas.

Their periaguas are made with a good deal of skill, and have an out-rigger. Neither the head nor the stern is raised, but there is a kind of deck over each of them, and in the middle of these decks is a row of wooden pegs, ending in form of large nails, but their heads are covered with a fine shell, which is of a clear white. The sail of their periaguas is of a triangular shape, composed of several mats. Two of its sides are bent to two sticks, one of which supported it up along the mast; and the other, which is fixed in the outer clew, answers the purpose of a boom. These periaguas followed us pretty far out to sea, when we filled the sails; some came likewise from the two little isles, and in one of them was an ugly old woman. Aotourou expressed the greatest contempt for these islanders.

We met with some calms, being to leeward of the larger island, which made me give up the scheme of passing between it and the little ones. The channel between them is a league and a half in breadth, and it seems as if there was some anchorage to be found. At six in the evening we discovered from the masts more land to W. S. W. appearing as three detached hummocks. We steered S. W. and two hours after mid-night we saw the same land again, in W. 2° S. The first islands; which by the help of the moon-shine we still could perceive, then bore N. E. of us.

Continuation of islands.

On the 5th in the morning we saw that this new land was a very fine isle, of which we had only seen, the summits the day before. It was interspersed with mountains and vast plains, covered with cocoa-nut and many other trees. We ranged its southern coast, at one or two leagues distance, without seeing any appearances of anchorage, the sea breaking upon the shore very violently. There are even breakers to the westward of its westernmost point, which runs about two leagues into the sea. We have from several bearings got the exact position of this coast. A great number of periaguas sailing, and similar to those of the last isles, came around the ships, without however venturing to come close to us; a single one came alongside of the *Etoile*. The Indians seemed to invite us by signs to come on shore: but the breakers prevented it. Though we ran seven or eight knots at this time, yet the periaguas sailed round us with the same ease as if we had been at anchor. Several of them were seen from the masts sailing to the southward. At six o'clock in the morning we had got sight of another land to westward; some clouds then intercepted it from our sight, and it appeared again at ten. Its shore ran S. W. and appeared to be at least as high, and of as great extent as the former ones, with which it lies nearly E. and W. about twelve leagues asunder. A thick fog which rose in the afternoon, and continued all the next night and ensuing day, prevented our viewing it more particularly. We only distinguished at its N. E. extremity two little isles, of unequal sizes.

Position of these isles which form the second division.

The longitude of these isles is nearly the same in which Abel Tasman was, by his reckoning, when he discovered the isles of Amsterdam, Rotterdam, Pylstaart, those of Prince William, and the shoals of *Fleemskerk*. [1] It is likewise the same which, within a very little, is assigned to the Solomon's isles. Besides, the periaguas, which we saw sailing to the southward, seem to shew that there are other isles in that part.

1 Valentyn and others say *Heemskirk*. See Dalrymple's Historical Collection of Voyages in the South Pacific Ocean, p. 83.

Thus these isles seem to form a chain under the same meridian; they make the third division, which we have named *l'Archipel des Navigateurs*, or Archipelago of the Navigators. [1] On the 11th in the morning, having steered W. by S. since we got sight of the last isles, we discovered a land bearing W. S. W. seven or eight leagues distant. At first it was thought they were two separate isles, and we were kept at a distance from them all day by a calm. On the 12th we found that it was only one isle, of which, the two elevated parts were connected by a low land, seemingly bending like a bow, and forming a bay open to the N. E. The high land lies N. N. W. A head wind prevented our approaching nearer than six or seven leagues of this island, which I named *l'Enfant Perdu*, or the Forlorn Hope.

Meteorological observations.

The bad weather which began already on the 6th of this month, continued almost uninterrupted to the 20th, and during all that time we had calms, rains, and west winds to encounter. In general, in this ocean which is called Pacific, the approach to lands is attended with tempests, which are still more frequent during the decrease of the moon. When the weather proves squally, and there are thick clouds fixed upon the horizon, they are almost certain signs of some isles, and give timely notice to be upon guard against them. It cannot be comprehended with what precautions and what apprehensions, these unknown seas must be navigated, as you are there on all sides threatened with the unexpected appearance of lands and shoals, and these apprehensions are heightened by the length of the nights in the torrid zone. We were obliged to make way as it were blindfold, altering our course when the horizon appeared too black before us. The scarcity of water, the want of provisions, and the necessity of making advantage of the wind whenever it blew, would not allow us to proceed with the slowness of a prudent navigation, and to bring to, or stand on our boards, whenever it was dark.

Critical situation we are in.

The scurvy in the mean while made its appearance again. A great part of the crew, and almost all the officers, had their gums affected, and the mouth inflamed with it. We had no refreshments left, except for the sick, and it is difficult to use one self to eat nothing but salt flesh and dried pulse. At the same time there appeared in both ships several venereal complaints, contracted at Taiti.

1 Tobia, the man who went away from Otahitee, on board the Endeavour, according to the published *Journal of a Voyage round the World*, gave our circumnavigators accounts of many more islands in these seas, some of which were really found by our people; but many more were known only from his narrative of an expedition of these islanders to the west. As the number of these isles seems to be so considerable, it would certainly deserve another expedition to discover them all; and though at present the advantages seem to be of no great consequence, which might be reaped from an intercourse with these islanders; it is however certain, that the same objection might have been made to the first discoverers of America; and every body is at present sensible of the benefit accruing to these kingdoms from its American settlements. F.

They had all the symptoms known in Europe. I ordered Aotourou to be searched; he was quite ruined by it; but it seems in his country this disease is but little minded; however, he consented to be taken care of by the surgeons. Columbus brought this disease from America; here it is in an isle in the midst of the greatest ocean. Have the English brought it thither? Or ought the physician to win, who laid a wager, that if four healthy stout men were shut up with one healthy woman, the venereal complaint would be the consequence of their commerce?

The 22d at day break, as we stood to the westward, we saw a long high land a-head. When the sun rose we discovered two isles; the most southerly one bore from S. by E. to S. W. by S. and seemed to run N. N. W. corrected, being about twelve leagues long in that direction. It received the name of the day, *Isle de la Pentecôte*, Whitsuntide isle. The second bore from S. W. $\frac{1}{2}$ S. to W. N. W. the time when it first appeared to us was the occasion of our giving it the name of Aurora. We immediately stood as near as possible on the larboard tack, in order to pass between the two isles. The wind failed us, and we were obliged to bear away in order to pass to the leeward of the isle of Aurora. As we advanced to the northward, along its eastern shore, we saw a little isle rising like a sugar-loaf, bearing N. by W. which we called Peak of the Etoile (*Pic de l'Etoile*). We continued to range the isle of Aurora a league and a half distant. It runs N. and S. corrected from its southermost point to about the middle of its length, which in the whole is ten leagues. It then declines to the N. N. W. it is very narrow, being to the utmost two leagues broad. Its shores are steep, and covered with woods. At two o'clock in the afternoon we perceived the summits of high mountains over this island, and about ten leagues beyond it. They belonged to a land, of which at half past three we saw the S. W. point, bearing S. S. W. by the compass, above the northern extremity of Aurora island. After doubling the latter we steered S. S. W. when at sun-setting a new elevated coast, of considerable extent, came in sight. It extended from W. S. W. to N. W. by N. about fifteen leagues distant.

We made several boards during night to get to the S. E. in order to discover whether the land which lay to S. S. W. of us joined to Whitsuntide isle, or whether it formed a third isle. This we verified on the 23d at day-break. We discovered the separation of the three islands. The isles of Whitsuntide and Aurora are nearly under the same meridian, two leagues distant from-each other. The third isle lies S. W. of Aurora, and in the nearest part, they are three or four leagues asunder. Its north-west coast has at least twelve leagues in extent, and is high, steep, and woody. We coasted it during part of the morning on the 23d. Several periaguas appeared along the shore, but none seemed desirous to come near us. We could see no huts, only a great number of smokes rising out of the woods, from the sea-shore, up to the tops of the mountains. We sounded several times very near the shore; but found no bottom with fifty fathom of line.

Landing up on one of the isles.

About nine o'clock the sight of a coast, where it seemed landing would prove easy, determined me to send on shore, in order to take in some wood, which we were much in need of, to gain intelligence concerning the country, and to endeavour to get refreshments from thence for our sick. I sent off three armed boats, under the command of ensign [1] the chevalier de Kerué, and we stood off and on, ready to send them any assistance, and to support them by the artillery from both ships, if necessary.

1 *Enseigne de la Marine.*

We saw them land, without the islanders seeming to have opposed their landing. In the afternoon, I and some other persons went in a yawl to join them. We found our people employed in cutting wood, and the natives helping them to carry it to the boats. The officer who commanded our party, told me, that when he arrived, a numerous troop of islanders were come to receive them on the beach, with bows and arrows in hand, making signs that they should not come ashore; but that when, notwithstanding their threats, he had given orders for landing, they had drawn back several yards; that in proportion as our people advanced, the savages retired; but always in the attitude of being ready to let go their arrows, without suffering our people to come nearer them; that at last, having given his people orders to stop, and the prince of Nassau having desired to advance alone towards them, the islanders had ceased to retire, seeing only one man come to them; that some pieces of red cloth being distributed amongst them, had brought about a kind of confidence between them. The chevalier de Kerué immediately posted himself at the entrance of the wood, made the workmen cut down trees, under the protection of the troops he had with him, and sent a detachment in search of fruits. Insensibly the islanders approached in a more friendly manner to all appearance; they even let our people have some fruits. They would not have any nails or other iron, and likewise constantly refused to exchange their bows and their clubs, only giving us some arrows. They always kept in great numbers around our people, without ever quitting their arms; and those who had no bows, held stones ready to throw at our men. They gave us to understand, that they were at war with the inhabitants of a neighbouring district. There, actually appeared an armed troop of them, coming in good order from the west part of the island; and those who were near us seemed disposed to give them a warm reception; but no attack was made.

In this situation we found things when we came a-shore. We staid there till our boats were laden with fruits and wood. I likewise buried at the foot of a tree, the act of taking possession of these isles, engraved on an oak plank, and after that we embarked in our boats again. This early departure, doubtless, ruined the project of the islanders to attack us, because they had not yet

They attack the French.

disposed every thing for that purpose; at least we were inclined to think so, by seeing them advance to the sea-shore, and send a shower of stones and arrows after us. Some muskets fired off into the air, were not sufficient to rid us of them; many advanced into the water, in order to attack us with more advantage; another discharge of muskets, better directed, immediately abated their ardour, and they fled to the woods with great cries. One of our sailors was slightly wounded by a stone.

Description of the islanders.

These islanders are of two colours, black and mulattoes. Their lips are thick, their hair woolly, and sometimes of a yellowish colour. They are short, ugly, ill-proportioned, and most of them infected with leprosy; a circumstance from which we called the island they inhabit, Isle of Lepers (*Isle des Lepreux*). There appeared but few women; and they were not less disagreeable than the men; the latter are naked, and hardly cover their natural parts; the women wear some bandages to carry their children on their backs; we saw some of the cloths, of which they are made, on which were very pretty drawings, made with a fine crimson colour. I observed that none of the men had a beard; they pierce their nose, in order to fix some ornaments to it. They likewise wear on the arm, in form of a bracelet, the tooth of a babyrouffa, or a ring of a substance which I take to be ivory; on the neck they hang pieces of tortoise-shells, which they signified to us to be very common on their shores.

Their weapons.

Their arms are bows and arrows, clubs of iron-wood, and stones, which they use without slings. The arrows are reeds, armed with a long and very sharp point made of a bone. Some of these points are square, and armed on the edges with little prickles in such a manner as to prevent the arrow's being drawn out of a wound. They have likewise sabres of iron-wood. Their periaguas did not come near us; at a distance they seemed built and rigged like those in the Isles of Navigators.

Description of the place we landed at.

The beach where we landed was of very little extent. About twenty yards from the sea, you are at the foot of a mountain, which is covered with trees, notwithstanding its great declivity. The soil is very light, and of no great depth: accordingly the fruits, though of the same species with those at Taiti, are not so fine and not so good here. We found a particular species of figs here. There are many paths through the woods, and spots enclosed by pallisadoes three feet high. We could not determine whether they are intrenchments, or merely limits of different possessions. We saw no more than five or six little huts, into which one could not enter otherwise than by creeping on all-fours; and we were however surrounded by a numerous people; I believe they are very wretched, on account of the intestine war, of which we were witnesses, and which brings great hardships upon them. We repeatedly heard the harsh sound of a kind of drum, coming from the interior parts of the wood, towards the summit of the mountain. This certainly gives the signal to rally; for at the moment when the discharge of our muskets had dispersed them, it began to beat, it likewise redoubled its sound, when that body of enemies appeared, whom we saw several times. Our Taiti-man, who desired to go on shore with us, seemed to think this set of men very ugly; he did not understand a single word of their language.

Continuation of our course among the lands.

When we came on board, we hoisted in our boats, and made sail standing to the S. W. for a long coast which we discovered, extending as far as the eye could reach from S. W. to W.N. W. During night there was but little wind, and it constantly veered about; so that we were left to the mercy of the currents, which carried us to the N. E. This weather continued all the 24th, and the night following; and we could hardly get three leagues off the Isle of Lepers. On the 25th, at five in the morning, we had a very fine breeze at E. S. E. but the Etoile, being still under the land, did not feel it, and remained in a calm. I advanced, however, all sails set, in order to observe the land, which lay to westward. At eight o'clock we saw land in all parts of the horizon; and we were, as it were, shut up in a great gulph. The isle of Whitsuntide extended on the south side towards the new coast we had just discovered; and we were not sure whether it was not connected, or whether what we took to be the separation was any more than a great bay. Several places in the remainder of the coast likewise shewed appearances of passages, or of great gulphs. Among the rest there seemed to be a very considerable one to the westward. Some periaguas crossed from one land to the other. At ten o'clock we were obliged to stand towards the Isle of Lepers again. The Etoile, which could no longer be seen from the mast-head, was still becalmed there, though the E. S. E. breeze held out at sea. We flood for the store-ship till four o'clock in the evening; for it was not till then that she felt the breeze. It was too late when she joined us to think of further discoveries. Thus the day of the 25th was lost, and we passed the night making short tacks.

The bearings we took on the 26th, at sun-rising, shewed us that the currents had carried us several miles to the southward, beyond our reckoning. Whitsuntide isle still appeared separated from the S. W. land, but the passage seemed narrower. We discovered several other openings on that coast, but were not able to distinguish the number of isles which composed the Archipelago around us. The land seemed to us to extend from E. S. E. to W. N. W. by the south

Aspect of the country.

(by compass); and we could not see the termination of it. We steered from N. W. by W. gradually coming round to west, along a fine shore covered with trees, on which there appeared great pieces of ground, which were either actually cultivated, or seemed to be so. The country appeared fertile; and some of the mountains being barren, and here and there of a red colour, seemed to indicate that it contained minerals. As we continued our course we came to the great inlet, which we had observed to the westward the day before. At noon we were in the middle of it, and observed the sun's height there. Its opening is five or six leagues wide; and it runs due E. by S. and W. by N. Some men appeared on the south coast, and some others came near the ships in a periagua; but as soon as they were within musket shot, they would not come nearer, though we invited them; these men were black.

We ranged the north coast at the distance of three quarters of a league; it is not very high, and covered with trees. A number of negroes appeared on the shore; even some periaguas came towards us; but with as little confidence as that which came from the opposite coast. After having run along this, for the space of two or three leagues, we saw a great inlet, seeming to form a fine bay, at the entrance of which were two islands. I immediately sent our boats well armed to reconnoitre it; and during this time we stood on our boards, at one or two leagues distance off shore, often sounding without finding bottom, with 200 fathom of line.

Attempts to search an anchorage.

About five o'clock we heard a discharge of muskets, which gave us much concern: it came from one of our boats, which, contrary to my orders, had separated from the others, and unluckily was exposed to the attacks of the islanders, being got quite close to the shore. Two arrows, which were shot at the boat, served as a pretence for the first discharge. She then went along the coast, and kept up a brisk fire from her muskets and pedereroes, directing them both upon the shore, and upon three periaguas which passed by her within reach of shot, and had shot some arrows at her. A point of land intercepted the boat from our sight, and her continual firing gave me reason to fear that she was attacked by a whole fleet of periaguas. I was just going to send the long-boat to her assistance, when I saw her quite alone, doubling the point, which had concealed her. The negroes howled excessively in the woods, whither they had all retired, and where we could hear their drum beating. I immediately made signal to the boat to come on board, and I took my measures to prevent our being dishonoured for the future, by such an abuse of the superiority of our power.

What prevents our anchoring there.

The boats of the Boudeuse found that this coast, which we took to be continued, was a number of isles; so that the bay is formed by the junction of several channels, which separate them. However, they found a pretty good sandy bottom there, in 40, 30, and 20 fathom; but its continual inequality rendered this anchorage unsafe, especially for us, who had no anchors to venture. It was, besides, necessary to anchor there above half a league off shore, as the bottom was rocky nearer the coast. Thus the ships could not have protected the boats, and the country is

so woody, that we would have been obliged always to have our arms in hand, in order to cover the workmen against surprizes. We could not flatter ourselves that the natives should forget the bad treatment they had just received, and should consent to exchange refreshments. We observed the same productions here as upon the Isle of Lepers. The inhabitants were likewise of the same species, almost all black, naked, except their nudities, wearing the same ornaments of collars, and bracelets, and using the same weapons.

Another attempt to put in here.

We passed this night on our boards. On the 27th in the morning we bore away, and ranged the coast at about a league's distance. About ten o'clock we saw, on a low point, a plantation of trees, laid out in walks, like those of a garden. Under the trees there was a beaten track, and the soil seemed to be sandy. A considerable number of inhabitants appeared about this part on the other side of this point there was an appearance of an inlet, and I hoisted the boats out. This was a fruitless attempt; for it was nothing but an elbow formed by the coast, and we followed it to the N. W. point, without finding any anchorage. Beyond that point the land returned to N. N. W. and extended as far as the eye could reach; it was of an extraordinary height, and shewed a chain of mountains above the clouds. The weather was dark, with squalls and rain at intervals. Often in day-time we thought we saw land a-head of us; mere fog banks, which disappeared when it cleared up. We passed all the night, which was a very stormy one, in plying with short boards, and the tides carried us to the southward, far beyond our reckoning. We saw the high mountains all day on the 28th till sun-set, when they bore from E. to N. N. E. twenty or twenty-five leagues distant.

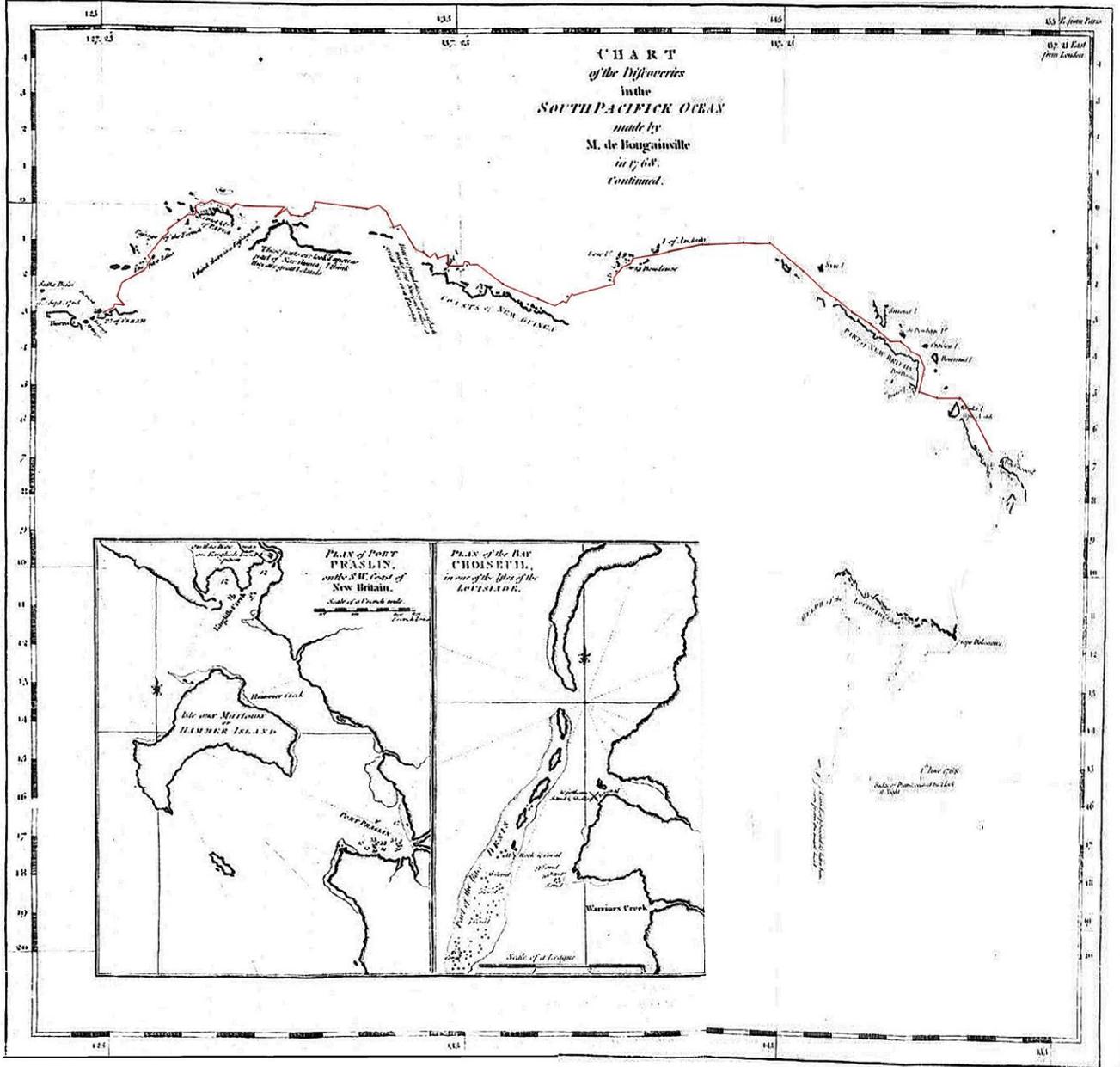
Conjectures concerning these lands.

The 29th in the morning we saw no more of the land, having steered W. N. W. I called the lands we had now discovered, Archipelago of the great Cyclades (*Archipel des grandes Cyclades*). To judge of this Archipelago by what we have gone through, and by what we have seen of it at a distance, it contains at least three degrees of latitude, and five of longitude. I likewise readily believe that Roggewein saw its northern extremity in 11° of latitude, and called it *Thienhoven* and *Groningen*. As for ourselves, when we fell in with it, every thing conspired to persuade us that it was the *Tierra Austral del Espiritù Santo*. Appearances seemed to conform to Quiros's account, and what we daily discovered, encouraged our researches. It is singular, enough, that exactly in the same latitude and longitude where Quiros places his bay of St. Philip and St. Jago, on a coast which at first sight seemed to be that of a continent, we should find a passage exactly of the same breadth which he assigns to the entrance of his bay. Has this Spanish navigator seen things in a wrong light? Or, has he been willing to disguise his discoveries? Was it by guess that the geographers made this Tierra del Espiritu Santo the same continent with New Guinea? To resolve this problem, it was necessary to keep in the same latitude for the space of three hundred and fifty leagues further. I resolved to do it, though the condition and the quantity of our provisions seemed to give us reason to make the best of our way to some European settlement. The event has shewn that little was wanting to make us the victims of our own perseverance.

Differences between the reckoning and the observations.

M. Verron made several observations during the month of May, and their results determined our longitude on the 5th, 9th, 13th, and 22d. We had not till now found so many differences between the observations and the ship's reckoning, all falling on one side. On the 5th at noon I

was more to the east than the observed longitude, by $4^{\circ} 00' 42''$; on the 9th, by $4^{\circ} 23' 4''$; on the 13th, by $3^{\circ} 38' 15''$; and lastly, on the 22d, by $3^{\circ} 35'$. All these differences shew, that from the isle of Taiti, the currents had carried us much to the westward. By this means it might be explained, why all the navigators who have crossed the Pacific ocean have fallen in with New Guinea much sooner than they ought. They have likewise given this ocean not by far so great an extent from east to west as it really has. I must however observe, that whilst the sun was in the southern hemisphere, our reckoning has been to the westward of the observations; and that, after he passed to the other side of the line, our differences have changed. The thermometer during this month was commonly between 19° and 20° , it fell twice to 18° , and once to 15° . Whilst we were amidst the great Cyclades, some business called me on board the Etoile, and I had an opportunity of verifying a very singular fact. For some time there was a report in both ships, that the servant of M. de Commerçon, named Baré, was a woman. His shape, voice, beardless chin, and scrupulous attention of not changing his linen, or making the natural discharges in the presence of any one, besides several other signs, had given rise to, and kept up this suspicion. But how was it possible to discover the woman in the indefatigable Baré, who was already an expert botanist, had followed his master in all his botanical walks, amidst the snows and frozen mountains of the straits of Magalhaens, and had even on such troublesome excursions carried provisions, arms, and herbals, with so much courage and strength, that the naturalist had called him his beast of burden? A scene which passed at Taiti changed this suspicion into certainty. M. de Commerçon went on shore to botanize there; Baré had hardly set his feet on shore with the herbal under his arm, when the men of Taiti surrounded him, cried out, It is a woman, and wanted to give her the honours customary in the isle. The Chevalier de Bournand, who was upon guard on shore, was obliged to come to her assistance, and escort her to the boat. After that period it was difficult to prevent the sailors from alarming her modesty. When I came on board the Etoile, Baré, with her face bathed in tears, owned to me that she was a woman; she said that she had deceived her master at Rochefort, by offering to serve him in mens cloaths at the very moment when he was embarking; that she had already before served a Geneva gentleman at Paris, in quality of a valet; that being born in Burgundy, and become an orphan, the loss of a law-suit had brought her to a distressed situation, and inspired her with the resolution to disguise her sex; that she well knew when she embarked that we were going round the world, and that such a voyage had raised her curiosity. She will be the first woman that ever made it, and I must do her the justice to affirm that she has always behaved on board with the most scrupulous modesty. She is neither ugly nor handsome, and is no more than twenty-six or twenty-seven years of age. It must be owned, that if the two ships had been wrecked on any desert isle in the ocean, Baré's fate would have been a very singular one.



CHAP. V

*Run from the great Cyclades; discovery of the gulph of Louisiade;
extremity to which we are reduced there; discovery of new isles;
putting into a port on New Britain,*

Direction of our course after leaving the Cyclades.

FROM the 29th of May, when we lost sight of the land, I sailed westward with a very fresh east, or south east wind. The Etoile considerably retarded our sailing. We sounded every four and twenty hours, finding no bottom with a line of two hundred and forty fathom. In day time we made all the sail we could, at night we ran under reefed top-sails, and hauling upon a wind

1768. June.

when the weather was too dark. The night between the 4th and 5th of June, we were standing to the westward under our top-sails by moon-shine, when at eleven o'clock we perceived some

Meeting with breakers.

breakers, and a very low sand bank, to the southward, half a league from us. We immediately got the other tacks on board, at the same time making a signal of danger to the Etoile. Thus we ran till near five in the morning, and then we resumed our former course to W. S. W. in order to view this land. We saw it again at eight o'clock, at about a league and a half distance. It is a little sandy isle, which hardly rises above the water; and which, on that account, is a dangerous shoal for ships sailing at night, or in hazy weather. It is so flat, that at two leagues distance, with a very clear horizon, it can only be seen from the mast head; it is covered with birds; I called it the Shoal of Diana (*la Bâture de Diane*).

On the 5th, at four o'clock in the afternoon, some of our people thought they saw the land and breakers to the westward; they were mistaken, and we continued our course that way till ten in the evening. The remaining part of the night we lay-to, or made short boards, and at day-break

Signs of land.

we resumed our course, all sails set. For twenty-four hours past, several pieces of wood, and some fruits which we did not know, came by the ship floating: the sea too was entirely fallen, notwithstanding the very fresh S. E. wind that blew, and these circumstances together gave me room to believe that we had land pretty near us to the S. E. We likewise saw a new kind of flying fish in those parts; they are black, with red wings, seem to have four wings instead of two, and somewhat exceed the common ones in size.

The 6th, at half an hour past one o'clock in the afternoon, a sand-bank appeared about three quarters of a league distant a-head, and convinced me that it was time to alter the course, which I had always continued to westward. This sand extended at least half a league from W. by S. to W. N. W. Some of our people even were of opinion they saw a low land to the S. W. of the breakers. We stood to the northward till four o'clock, and then again to the westward. This, however, did not last long; for at half past five o'clock, the men at the mast-heads saw fresh breakers to the N. W. and N. W. by W. about a league and a half from us. We approached nearer, in order to view them better. They were seen to extend above two miles from N. N. E. to S. S. W, and we could not see an end of them. In all probability they joined those which we had discovered three hours before. The sea broke with great violence on these shoals, and some

summits of rocks appeared above water from space to space. This last discovery was the voice of God, and we were obedient to it. Prudence not permitting us to pursue an uncertain course at night, in these dangerous parts, we spent it making short boards in that space, with which we had made ourselves acquainted in the preceding day; and on the 7th, in the morning, I gave orders to steer N. E. by N. abandoning the scheme of proceeding further westward in the latitude of 15° .

Necessary alteration of the course.

We had certainly great reason to believe, that the Tierra Austral del Espíritu Santo was no more than the Archipelago of the great Cyclades, which Quiros took to be a continent, and represented in a romantic light. When I persevered in keeping in the parallel of 15° , it was because I wanted to verify our conjectures, by getting sight of the eastern coasts of New Holland. Thus, according to the Astronomical Observations, (of which the uniformity for a month, and upwards, was a sufficient proof of their accuracy) we were already, on the 6th at noon, in 146° east latitude; that is one degree more to the westward than the Tierra del Espíritu Santo, as laid down by M. Bellin. Besides this, our repeated meeting with the breakers, which we had seen these three days; those trunks of trees, these fruits and sea-weeds, which we found at every moment; the smoothness of the sea, and the direction of the currents, all sufficiently marked the vicinity of a great land; and that it already surrounded us to the S. E. This land is

Geographical reflections.

nothing else than the eastern coast of New Holland. Indeed these numerous shoals, running out to sea, are signs of a low land; and when I see Dampier abandoning in our very latitude of $15^{\circ} 35'$, the western coast of this barren region, where he did not so much as find fresh water, I conclude that the eastern coast is not much better. I should willingly believe, as he does, that this land is a clutter of isles, the approach to which is made difficult by a dangerous sea, full of shoals and sand-banks. After such an explanation, it would have been rashness to risk running in with a coast, from whence no advantage could be expected, and which one could not get clear of, but by beating against the reigning winds. We had only bread for two months, and pulse for forty days; the salt-meat was in greater quantities; but it was noxious, and we preferred the rats to it, which we could catch. Thus it was by all means time to go to the northward, and even to deviate a little to the eastward of our course.

Unluckily the S. E. wind left us here; and when it returned, it put us into the most dangerous situation we had as yet been in. From the 7th, our course made good, was no better than N. by E. when on the 10th, at day-break, the land was discovered, bearing from east to N. W.

Discovery of new lands.

Long before the break of day, a delicious smell announced us the vicinity of this land, which forms a great gulph open to the S. E. I have seen but few lands, which bore a finer aspect than this; a low ground, divided into plains and groves, lay along the sea-shore, and from thence it rose like an amphitheatre up to the mountains, whose summits were lost in the clouds. There were three ranges of mountains; and the highest chain was above twenty-five leagues in the interior parts of the country. The wretched condition to which we were reduced, did not allow us, either to spend some time in visiting this beautiful country, that by all appearances, was fertile and rich; nor to stand to westward in search of a passage on the south side of New Guinea, which might open a new and short navigation to the Molucas, by the gulph of Carpentaria. Nothing, indeed, was more probable, than the existence of such a passage; it was

even believed, that the land had been seen as far as W. by S. We were now obliged to endeavour to get out of this gulph as soon as possible, and by the way which seemed to be most open: indeed we were engaged much deeper in than we at first thought. Here the S. E. wind caused us, to put our patience to the greatest trials.

Critical situation in which we are.

During the 10th, the calm left us at the mercy of a great south-eastern swell, which hove us towards the land. At four o'clock in the evening, we were no more than three quarters of a league distance from a little low isle, to the eastern point of which lies connected a ledge, which extends two or three leagues to the eastward. Towards five o'clock we had brought our head off, and we passed the night in this dreadful situation, making all our efforts to get off shore with the least breezes. On the 11th, in the afternoon, we were got to about four leagues from the coast; at two leagues distance you are out of soundings. Several periaguas sailed along the shore, on which we always saw great fires. Here are turtles; for we found the remains of one in the belly of a shark.

The same day, at sun-setting, we set the eastermost land, bearing E. by N. 2^0 E. by compass, and the westermost bearing W. N. W. both about fifteen leagues distant. The following days were dreadful; every thing was against us; the wind constantly blowing very fresh at E. S. E. and S. E. the rain; a fog so thick, that we were obliged to fire guns, in order to keep company with the Etoile, which still contained part of our provisions; and, lastly, a very great sea, which hove us towards the shore. We could hardly keep our ground by plying, being obliged to wear, and to carry but very little sail. Thus were we forced to make our boards; in the dark, in the midst of a sea, strewed with shoals; being obliged to shut our eyes to all signs of danger. The night between the 11th and 12th, seven or eight of the fish, which are called *cornets*, [1] and which always keep at the bottom of the sea, leaped upon the gang-boards. There likewise came some sand and weeds from the bottom upon our fore-castle; it being left there by the waves that

Multiplied dangers which we run.

beat over it. I did not choose to sound; it would not have lessened the certainty of the danger, which was always the same, whatever expedient we could take.

Upon the whole, we owe our safety to the knowledge we had of the land on the 10th in the morning, immediately before this continuance of bad and foggy weather. Indeed the winds being E. S. E. and S. E. I should have thought steering N. E. an excess of precaution against the obscurity of the weather. However this course evidently brought us into the most imminent danger of being lost, as the land extended even to E. S, E.

The weather cleared up on the 16th, the wind still remaining contrary; but we had at least got day-light again. At six o'clock in the morning we saw the land from north to N. E. by E. by compass, and we plied in order to double it. On the 17th, in the morning, we did not see any land at sun-rising; but at half past nine o'clock we perceived a little island to the N. N. E, by compass, five or six leagues distant, and another land to N. N. W. about nine leagues off. Soon after we discovered in N. E. $\frac{1}{2}$ E. four or five leagues distant, another little isle; which from its resemblance to *Ushant*, [2] obtained the same name.

1 *Cornets* are a species of shell-fish. F.

2 *Oussant*.

We continued our board to N. E. by E. hoping to double all these lands, when, at eleven o'clock, we discovered more land, bearing N. E. by E. $\frac{1}{2}$ E. and breakers to E N. E. which seemed to join Ushant. To the N. W. of this little isle, we saw another chain of breakers, extending half a league. The first isle likewise seemed to be between two chains of breakers.

All the navigators, who ever came into these parts, always dreaded to fall to the southward of New Guinea, and of finding a gulph there corresponding to that of Carpentaria, which it would have proved difficult for them to clear. Consequently they have all in good time got into the latitude of New Britain, at which they touched. They all followed the same track; we opened a new one, and paid dear for the honour of the first discovery.

Extremities to which we are reduced.

Unhappily hunger, the most cruel of our enemies, was on board. I was obliged to make a considerable diminution in the allowance of bread and pulse. It likewise became necessary to forbid the eating of that leather, which is wrapped round the yards, and any other old leather, as it might have had the most dreadful consequences. We had a goat remaining, which had been our faithful companion since we left the Malouines, where we had taken her on board. Every day she gave us some milk. The hungry stomachs of the crew, in a capricious instant, condemned her to death; I could only pity her; and the butcher who fed her such a long time, shed tears over the victim which he thus sacrificed to our hunger. A young dog, taken in the straits of Magalhaens, shared the same fate soon after.

On the 17th, in the afternoon, the currents had been so favourable, that we had again taken the N. N. E. board, standing much to windward of Ushant, and the shoals around it. But at four o'clock we were convinced, that these breakers extend much farther than we were at first aware of; some of them were seen even in E. N. E. and there was yet no end of them. We were obliged, during night to return upon the S. S. W. tack, and in day-time the eastern one. On the 18th, during the whole morning, we saw no land; and we already gave ourselves up to the hope of having doubled these isles and breakers. Our joy was short; about one o'clock In the afternoon, an isle was seen in N. E. by N. by compass; and soon after it was followed by nine or ten others. Some of them bore E. N. E. and behind them a higher land extended to N. E. about ten leagues distant. We plyed to windward all night; the day following gave us a view of the same double chain of lands running nearly east and west, viz. to the southward, a number of little isles connected by reefs, even with the surface of the water, to the northward of which extended the higher lands. The lands we discovered on the 20th seemed to be less southward, and only to run E. S. E. This was an amendment in our position. I resolved to run boards of four and twenty hours; we lost too much time in putting about more frequently; the sea being extremely rough, and the wind blowing very hard and constantly from the same point: we were likewise obliged to make very little sail, in order to spare our crazy masts, and damaged rigging; our ships too went very ill, being in a bad sailing trim, and not having been careened for so long a time.

We saw the land on the 25th at sun-rising, extending from N. to N. N. E. but it was now no longer low; on the contrary we saw a very high land, seemingly terminating in a large cape. It was probable that the coast after that should tend to the northward. We steered all clay N. E. by E. and E. N. E. without seeing any land more easterly than the cape which we were doubling, with such a joy as I am not able to describe. On the 26th in the morning, the cape being much to leeward of us, and seeing no other lands to windward, we were at last enabled to alter our course again towards N.N.E.

This cape which we had so long wished for, was named Cape Deliverance, and the gulph, of which it forms the eastermost point, Gulph of the Louisiade (*golfe de la Louisiade*).

We at last double the lands of the gulph.

I think we have well acquired the right of naming these parts. During the fortnight we passed in this gulph, the currents have pretty regularly carried us to the eastward. On the 26th and 27th it blew a hard gale, the sea was frightful, the weather squally and dark. It was impossible to make any way during night.

We were about sixty leagues to the northward from Cape Deliverance, when on the 28th in the morning, we discovered land to the N. W. nine or ten leagues distant. It proved to consist of two isles, the most southern of which, at eight o'clock, bore N. W. by W. by compass. Another long and high coast appeared at the same time, bearing from E. S. E. to E. N. E. This coast extended to the northward, and as we advanced north eastward, it lengthened more, and turned to N. N. W. We however discovered a space where the coast was discontinued, either by a channel, or

We meet with new islands.

the opening of a large bay; for we thought we saw land at the bottom of it. On the 29th in the morning, the coast which lay to the eastward of us continued to extend N. W. though our horizon was not terminated by it on that side. I intended to come near it, and then to go along it in search of an anchorage. At three o'clock in the afternoon, being near three leagues off shore, We found bottom in forty-eight fathoms, white sand and broken shells: we then stood for a creek which seemed convenient; but we were becalmed, and thus the rest of the day was passed away fruitlessly. During night we made several short boards, and on the 30th, by break of day, I sent the boats with a detachment under the command of the chevalier Bournand, to visit several creeks along the shore, which seemed to promise an anchorage, as the bottom we had found at sea was a favourable sign. I followed him under an easy sail, ready to join him at the first signal he should give for that purpose.

Description of the islanders.

Towards ten o'clock, a dozen periaguas, of different sizes, came pretty near the ships, but would not come along-side of them. There were twenty-two men in the largest, in the middling ones eight or ten, and in the least two or three. These periaguas seemed well built; their head and stern are raised very much; they are the first we saw in these seas that had no outriggers. These islanders are as black as the negroes of Africa; their hair is curled, but long, and some of a reddish colour. They wear bracelets, and plates on the neck and forehead; I know not of what substance they were, but they seemed to be white. They are armed with bows and lances (*sagaves*); they made a great noise, and it seemed as if their disposition was far from pacific. I recalled our boats at three o'clock; the chevalier de Bournand reported that he had almost every

Unsuccessful attempt to find anchorage here.

where found good anchoring ground, from thirty, twenty-five, twenty, fifteen to eleven fathoms, oozy sand, but that it was in open road, and without any river; that he had only seen one rivulet in all that extent. The open coast is almost inaccessible, the sea breaks upon it every where, the mountains extend to the very sea shore, and the ground is entirely covered with woods. In some little creeks there are some huts, but they are in very small number, for the islanders inhabit the mountains. Our pinnace was followed by three or four periaguas, that seemed willing to attack her. An islander actually rose several times to throw his lance (*sagaye*); however, he did not throw it, and the boat returned on board without skirmishing.

Our situation was upon the whole very hazardous. We had lands, hitherto unknown, extending on one side from S. to N. N. W. by the E. and N. on the other side from W. by S. to N. W. Unhappily the horizon was so foggy from N. W. to N. N. W. that we could not distinguish any thing on that side further than two leagues off. However, I hoped in that interval to find a passage; we were too far advanced to return. It is true that a strong tide coming from the north and setting to the S. E. gave us hopes of finding an opening there. The strength of the tide was most felt from four o'clock to half an hour past five in the evening; the ships, though they had a very fresh gale, steered with much difficulty. The tide abated at six o'clock. During night we plied from S. to S. S. W. on one tack, and from E. N. E. to N. E. on the other. The weather was squally, with much rain.

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The 1st of July, at six in the morning, we found ourselves at the same point which we left the preceding evening; a proof that there was both flood and ebb. We steered N. W. and N. W. by N. At ten o'clock we entered into a passage about four or five leagues broad, between the coast which extended hither on the east side, and the land to the westward. A very strong tide, whose direction is S. E. and N. W. forms, in the middle of this passage, a race which crosses it, and

Dangerous shores.

where the sea rises and breaks, as if there were rocks even with the surface of the water. I called it Denis's race (*raz* [1] *Denis*), from the name of the master of my ship, an old and faithful servant of the king. The Etoile, who passed it two hours after us, and more to the westward found herself there in five fathoms of water, rocky bottom. The sea was so rough at that time, that they were obliged to lay the hatch-ways. On board the frigate we sounded forty-four fathoms, bottom of sand, gravel, shells, and coral. The eastern coast began here to lower and tend to the northward. On it we perceived, being nearly in the middle of the passage, a fine bay, which to all appearance promised a good anchorage, it was almost a calm, and the tide which then set to the N. W. carried us past it in an instant. We immediately hauled our wind, intending to visit this bay. A very violent shower of rain coming on at half an hour past eleven, prevented our seeing the land and the sun, and obliged us to defer this scheme.

New attempts to find an anchorage.

At half an hour past one o'clock in the afternoon, I sent the boats, well armed, under the command of the ensign [2] chevalier d'Oraison, to sound and visit the bay; and during this operation, we endeavoured to keep near enough to follow his signals. The weather was fair, but almost calm. At three o'clock we saw the rocky bottom under us, in ten and in eight fathoms. At four our boats made signal of a good anchorage, and we immediately worked with all sails set to gain it. It blew very little, and the tide set against us. At five we repassed the rocky bank in ten, nine, eight, seven and six fathoms. We likewise saw an eddy within a cables length to the S. S. E. seeming to indicate that there was no more than two or three fathoms of water.

1 *Raz* (or *rat*, a race or whirlpool) is a place in the sea where there is some rapid and dangerous current, or where there are different tides. Such a *rat* is commonly to be met with in a strait or channel, but sometimes likewise in the high seas. See the *Dictionnaire Militaire portatif*, 12mo.3vols. 1758. Paris. F.

2 *Enseigne de Vaisseau*.

By steering to N. W. and N. W. by N. we deepened our water. I made signal to the Etoile to bear away, in order to avoid this bank, and I sent her boat to her to guide her to the anchorage. However, we did not advance, the wind being too weak to assist us in stemming the tide, and night coming on very fast. In two full hours we did not gain half a league, and we were obliged to give up all thoughts of coming to this anchorage, as we could not go in search of it in the dark, being surrounded by shoals, reefs, and rapid and irregular currents. Accordingly we stood W. by N. and W. N. W. in order to get off shore again, sounding frequently. Having made the north point of the N. E. land, we bore away N. W. afterwards N. N. W. and then north. I now resume the account of the expedition of our boats.

The islanders attack our boats.

Before they entered the bay, they had ranged its north point, which is formed by a peninsula, along which they found from nine to thirteen fathoms, sand and coral bottom. They then entered into the bay, and about a quarter of a league from the entrance, found a very good anchorage, in nine and twelve fathoms, bottom of grey sand and gravel, sheltered from S. E. to S. W. by the east and north. They were just taking soundings, when they all at once saw ten periaguas appear at the entrance of the bay, having on board about one hundred and fifty men, armed with bows, lances, and shields. They came out of a creek, at the bottom of which is a little river, whose banks are covered with huts. These periaguas advanced in good order, and as fast as possible towards our boats; and when they thought they were near enough, they divided very dexterously into two squadrons to surround them. The Indians then made horrible cries, and taking their bows and lances, they began an attack, which they must have thought would be a mere play to them, against such a handful of people. Our people discharged their arms at them; but this did not stop them. They continued to shoot their arrows and throw their lances, covering themselves with their shields, which they looked upon as a defensive weapon. A second discharge put them to flight; several of them leaped into the sea in order to swim on

Description of their boats.

shore. Our people took two of their periaguas: they are long, well wrought, their head and stern very much raised, to shelter the people against arrows, by turning either end of the boat towards the enemy. On the head of one of these periaguas, they had carved the head of a man; the eyes were of mother of pearl; the ears of tortoise-shell, and the whole figure resembled a mask with a long beard. The lips were dyed of a bright red. In their periaguas our people found bows, arrows in great quantity, lances, shields, cocoa-nuts, and several other fruits, of what species we could not tell, arecca, several little utensils employed by the Indians for various purposes, some nets with very fine meshes, very well knit, and the jaw of a man, half broiled. These

Description of the islanders.

islanders are black, and have curled hair, which they dye white, yellow or red. Their audacity in attacking us, their custom of bearing offensive and defensive arms, and their dexterous management of them, prove that they are almost constantly at war. We have in general observed in the course of this voyage, that the black men are much more ill-natured than those whose colour comes near to white. These islanders are naked, excepting their privy parts, which are covered by a piece of mat. Their shields are oval, and made of rushes, twilled above each other, and very well connected. They must be impenetrable by arrows. We called the river

and creek from when these brave islanders came, the Warriors River (*Riviere aux Guerriers*). The whole isle and the bay obtained the name of isle and Bay Choiseul. The peninsula on the north side of the bay is covered all over with cocoa-nut trees.

Farther discoveries which we made.

It blew very little the two following days. After leaving the passage, we discovered to the westward a long hilly coast, the tops of whose mountains were covered with clouds. The 2d in the evening we still saw part of the Isle of Choiseul. The 3d in the morning we saw nothing but the new coast, which is of a surprising height, and which lies N. W. by W. Its north part then appeared terminated by a point which insensibly grows lower, and forms a remarkable cape. I gave it the name of Cape *l'Averdi*. On the 3d at noon it bore about twelve leagues W. $\frac{1}{2}$ N. and as we observed the sun's meridian altitude, we were enabled to determine the latitude of this cape with precision. The clouds which lay on the heights of the land dispersed at sun-setting, and shewed us mountains of a prodigious height. On the 4th, when the first rays of the sun appeared, we got sight of some lands to the westward of Cape *l'Averdi*. It was a new coast, less elevated than the former, lying N. N. W. Between the S. S. E. point of this land and Cape *l'Averdi*, there remains a great gap, forming either a passage or a considerable gulph. At a great distance we saw some hillocks on it. Behind this new coast we perceived a much higher one, lying in the same direction. We stood as near as possible to come near the low lands. At noon we were about five leagues distant from it, and set its N. N. W. point bearing S. W. by W. In the afternoon three periaguas, in each of which were five or six negroes, came from the shore to view our ships. They stopped within musket shot, and continued at that distance near an hour, when our repeated invitations at last determined them to come nearer. Some trifles which were thrown to them, fastened on pieces of planks, inspired them with some confidence. They came along-side of the ships, shewing cocoa-nuts, and crying *buca, buca, onelle!* They repeated these words incessantly, and we afterwards pronounced them as they did, which seemed to give

Description of some islanders who came near the ship.

them much pleasure. They did not long keep along-side of the vessel. They made signs that they were going to fetch us cocoa-nuts. We applauded their resolution; but they were hardly gone twenty yards, when one of these perfidious fellows let fly an arrow, which happily hit nobody. After that, they fled as fast as they could row: our superior strength set us above punishing them.

These negroes are quite naked; they have curled short hair, and very long ears, which are bored through. Several had dyed their wool red, and had white spots on different parts of the body. It seems they chew *betel*, as their teeth are red. We found that the inhabitants of the Isle of Choiseul likewise make use of it; for in their periaguas we found little bags, containing the leaves, with areka and lime. From these negroes we got bows of six feet long, and arrows armed with points of a very hard wood. Their periaguas are less than those from the Warriors Creek; and we were surprised to find no resemblance in their construction. This last kind of periaguas had no great elevation at the head and stern; they were without any out-rigger, but broad enough for two men to work at the oar in one row. This isle, which we named *Bouka*, seems to be extremely well peopled, if we may judge so by the great number of huts upon it, and by the appearance of cultivation which it has. A fine plain, about the middle of the coast, all over planted with cocoa-nut trees, and other trees, offered a most agreeable prospect, and made me very desirous of finding an anchorage on it; but the contrary wind, and a rapid current, which carried to the N. W. visibly brought us further from it. During night we stood as close as possible, steering S. by W. and S. S. W. and the next morning the Isle of *Bouka* was already

very far from us to the east and S. E. The evening before, we perceived a little isle, bearing N. W. and N. W. by W. We could not, upon the whole, be far from New Britain, where we hoped to take shelter at.

Anchorage on the coast of New Britain.

On the 5th, in the afternoon, we got sight of two little isles to the N. and N. N. W. ten or twelve leagues distant, and almost at the same instant another more considerable one between N. W. and W. Of this last, the nearest lands at half past five o'clock in the evening, bore N. W. by W. about seven leagues distant. The coast was high, and seemed to form several bays. As we had neither water nor wood left, and our sick were growing worse, I resolved to stop here, and we made all night the most advantageous boards to keep this land under our lee. The 6th, at day-break, we were five or six leagues distant from it, and bore away for it, at the same moment when we discovered another new land, which was high, and in appearance very fine, bearing W. S. W. of the former, from eighteen to twelve, and to ten leagues distance. At eight o'clock, being about three leagues from the first land, I sent the chevalier du Bouchage with two armed boats to view it, and see whether there was an anchorage. At one o'clock in the afternoon he made signal of having found one; and I immediately gave order to fill the sails, and bore down for a boat, which he sent to meet us; at three o'clock we came to an anchor in 33 fathom, bottom of fine white sand, and ooze. The Etoile anchored nearer the shore than we did, in 21 fathom, same bottom.

Qualities and marks of the anchorage.

In entering, you have a little isle and a key to the westward, on the larboard side; they are about half a league off shore. A point, advancing opposite the key, forms within a true port, sheltered against all the winds; the bottom being, in every part of it, a fine white sand, from 35 to 15 fathom. On the eastern point there is a visible ledge, which does not extend out to sea. You likewise see, to the northward of the bay, two small ledges, which appear at low water. Close to the reefs there is 12 fathom of water. The entrance to this port is very easy; the only precaution which must be taken, is to range the eastern point very near, and to carry much sail; for as soon as you have doubled it, you are becalmed, and can enter only by the head-way, which the ship makes. Our bearings, when at an anchor, were as follows: The key, at the entrance, bore W. 9° 45' S. the eastern point of the entrance, W. 10° S. the western point, W. by N. the bottom of the harbour, S. E. by E.

We moored east and west, spending the rest of the day with those manœuvres, and with striking yards and top-masts, hoisting out our boats, and visiting the whole circuit of the harbour.

Description of the port and its environs.

It rained all the next night, and almost the whole day of the 7th. We sent all our water-casks on shore, pitched some tents, and began to fill water, take in wood, and make lies for washing, all which were absolutely necessary occupations. The landing-place was handsome, on a fine sand, without any rocks or surf; in the bottom of the port, in the space of four hundred yards, we found four brooks. We took three for our use; the one for the Boudeuse, and the other for the Etoile to water at, and the third for washing. The wood was near the sea-side, and there were several sorts of it, all very good fuel; some excellent for carpenters, joiners, and even for veneering. The two ships were within hail of each other, and of the shore. Besides this, the harbour and its environs were not inhabited within a great distance, by which means we enjoyed a very precious and undisturbed liberty. Thus we could not wish for a safer anchorage,

a more convenient place for taking in water and wood, making those repairs which the ships most urgently wanted, and letting our people, who were sick of the scurvy, ramble about the woods at their ease.

Such were the advantages of this harbour; but it likewise had its inconveniencies.

Notwithstanding all our searches, we could neither find cocoa-nut trees and bananas, nor had we any other resources, which by good-will, or by force could have been obtained in an inhabited country. If the fishery should not happen to be abundant, we could expect nothing else here than safety and the mere necessaries. We had therefore great reason to fear, that our sick would not recover. It is true, we had none that were very ill, but many were infected; and if they did not mend, the progress of the disease must of course become more rapid.

Extraordinary adventure.

On the first day we found a periagua, as it were deposited, and two huts, on the banks of a rivulet, at a mile's distance from our camp. The periagua had an outrigger, was very light, and in good order. Near it there were the remains of several fires, some great calcined shells, and some skeletons of the heads of animals, which M. de Commerçon said were wild boars. The savages had but lately been in this place; for some bananas were found quite fresh in the huts. Some of our people really thought they heard the cries of men towards the mountains; but we have since verified, that they have mistaken for such the plaintive notes of a large crested pigeon, of an azure plumage, and which has the name of *crowned bird* [1] in the Moluccas, We found something still more extraordinary on the banks of this river. A sailor, belonging to my barge, being in search of shells, found buried in the sand, a piece of a plate of lead, on which we read these remains of English words,

HOR'D HERE
ICK MAJESTY'S

There yet remained the mark of the nails, with which they had fastened this inscription, that did not seem to be of any ancient date. The savages had, doubtless, torn off the plate, and broke it in pieces.

This adventure engaged us carefully to examine all the neighbourhood of our anchorage. We therefore ran along the coast within the isle which covers the bay; we followed it for about two leagues, and came to a deep bay of very little breadth, open to the S. W. at the bottom of which we landed, near a fine river. Some trees sawed in pieces, or cut down with hatchers, immediately struck our eyes, and shewed us that this was the place where the English put in at. We now had little trouble to find the spot where the inscription had been placed.

1 This bird is a native of the Isle of Banda, one of the Moluccas, and is called by the Dutch *Kroon-Vogel*. Mr. Loten presented one, some years ago, alive to the late princess royal of England and of Orange. Mr. Brisson, in his *Ornithology*, vol. i. p. 279. t. 26. f.i. very improperly calls it a crowned Indian pheasant (*Faisan couronné des Indes*); and Mr. Brisson, in his *Planches Enluménées*, tab. 118. follows Brisson, though every one will be convinced that it is a pigeon, at the very first examination of its bill. Mr. Edwards has described and figured it, p. 269. t. 338. of the third volume of his *Gleanings*. Its plumage is blue, or lead-coloured the size, that of a turkey. In that noble repository of natural history and learning, the British Museum, there is a fine specimen of it. F.

It was a very large, and very apparent tree, on the right hand shore of the river, in the middle of a great place, where we concluded that the English had pitched their tents; for we still saw several ends of rope fastened to the trees; the nails stuck in the tree; and the plate had been torn off but a few days before; for the marks of it appeared quite fresh. In the tree itself, there were notches cut, either by the English or the islanders. Some fresh shoots, coming up from one of the trees which was cut down, gave us an opportunity of concluding, that the English had anchored in this bay but about four months ago. The rope, which we found, likewise sufficiently indicated it; for though it lay in a very wet place, it was not rotten. I make no doubt, but that the ship which touched here, was the Swallow; a vessel of fourteen guns, commanded by captain Carteret, and which sailed from Europe in August 1766, with the Dolphin, captain Wallace. We have since heard of this ship at Batavia, where I shall speak of her; and where it will appear, that we from thence followed her track to Europe. This is a very strange chance, by which we, among so many lands, come to the very spot where this rival nation had left a monument of an enterprize similar to our's.

The rain was almost continual to the 11th. There seemed to be a very high wind out at sea; but the port is sheltered on all sides, by the high mountains which surround it. We accelerated our works, as much as the bad weather would permit. I likewise ordered our longboat to under-run the cables, and to weigh an anchor, in order to be better assured concerning the nature of the bottom; we could not wish for a better.

Productions of the country.

One of our first cares had been to search, (and certainly it was our interest to do so) whether the country could furnish any refreshments to our sick, and some solid food to the healthy. Our searches were fruitless. The fishery was entirely unsuccessful; and we only found in the woods a few thatch-palms, and cabbage-trees in very small number; and even these we were obliged to dispute with enormous ants, of which innumerable swarms forced us to abandon several of these trees, already cut down by us. It is true, we saw five or six wild boars; and, since that time, some huntsmen were always out in search of them; but they never killed one. They were the only quadrupeds we saw here.

Some people likewise thought they had seen the foot-steps of a tyger cat. We have killed some large pigeons of great beauty. Their plumage was green-gold; their neck and belly of a greyish-white; and they have a little crest on the head. Here are likewise turtle-doves, some widow-birds, larger than those of the Brasils, parrots, crown-birds; and another kind, whose cry so well resembles the barking of a dog, that every one who hears it for the first time, must be deceived by it. We have likewise seen turtle in different parts of the channel; but this was not the season when they lay eggs. In this bay are fine sandy creeks, where I believe a good number of turtle could be caught at the proper time.

All the country is mountainous; the soil is very light, and the rocks are hardly covered with it. However, the trees are very tall, and there are several species of very fine wood. There we find the Betel, the Areca, and the fine Indian-reed, which we get from the Malays. It grows here in marshy places; but whether it requires a peculiar culture, or whether the trees, which entirely over-shadow the earth, hinder its growth, and change its quality, or whether we were not here at the proper season when it is in maturity, so much is certain, that we never found any fine ones here. The pepper-tree is likewise common to this country; but it had neither fruit nor flowers at this, season. The country, upon the whole, is not very rich for a botanist. There remain no marks in it of any fixed habitation: it is certain that the Indians come this way from time to time; we frequently found places upon the sea-shore, where they had stopped; the remnants of their meals easily betrayed them.

On the 10th, a sailor died on board the *Etoile*, of a complication of disorders, without any mixture of the scurvy. The three following days were fine, and we made good use of them. We refitted the heel of our mizen-mast, which was worm-eaten in the step; and the *Etoile* shortened hers, the head of it being sprung. We likewise took in, from on board the store-ship, the flour and biscuit which still belonged to us, in proportion to our number.

Cruel famine which we suffer.

There were fewer pulse than we at first thought, and I was obliged to cut off above a third part of the allowance of the (*gourganes*) pease or caravanses for our soup: I say ours, for every thing was equally distributed. The officers and the sailors had the same nourishment; our situation, like death, rendered all ranks of men equal. We likewise profited of the fair weather, to make good observations.

Observation of longitude.

On the 11th, in the morning, M. Verron brought his quadrant and pendulum on shore, and employed them the same day, to take the sun's altitude at noon. The motion of the pendulum was exactly determined by several corresponding altitudes, taken for two days consecutively. On the 13th, there was an eclipse of the sun visible to us, and we got every thing in readiness to observe it, if the weather permitted. It was very fair; and we saw both the moment of immersion, and that of emersion. M. Verron observed with a telescope of nine feet; the chevalier du Bouchage with one of Dollond's acromatic telescopes, four feet long; my place was at the pendulum. The beginning of the eclipse was to us, on the 13th, at 10h. 5' 45" in the morning, the end at 00h. 28' 16" true time, and its magnitude 3' 22". We have buried an inscription under the very spot where the pendulum had been; and we called this harbour *Port Praslin*.

This observation is so much the more important, as it was now possible, by its means, and by the astronomical observations, made upon the coast of Peru, to determine, in a certain fixed manner, the extent of longitude of the vast Pacific Ocean, which, till now, had been so uncertain. Our good fortune, in having fair weather at the time of the eclipse, was so much the greater, as from that day to our departure there was not a single day but what was dreadful. The continued rains, together with the suffocating heat, rendered our stay here very pernicious to us. On the 16th, the frigate had completed her works, and we employed all our boats to finish those of the *Etoile*. This store-ship was quite light, and as there were no stones proper for ballast, we were obliged to make use of wood for that purpose; this was a long troublesome labour, which in these forests, where an eternal humidity prevails, is likewise unwholesome. Here we daily killed snakes, scorpions, and great numbers of insects, of a singular sort. They are three or four inches long, and covered over with a kind of armour; they have six legs, projecting points on the sides, and a very long tail. Our people likewise brought me another creature, which appeared extraordinary to us all. It is an insect about three inches long, and belongs to the Mantis genus. Almost every part of its body is of such a texture, as one would take for a leaf, even when one looks closely at it. Each of its wings is one half of a leaf, which is entire when the two wings are closed together; the under side of its body resembles a leaf, of a more dead colour than the upper one. The creature has two antennæ and six legs, of which the upper joints are likewise similar to parts of leaves. M. de Commerçon has described this singular insect; and I placed it in the king's cabinet, preserved in spirits.

1 They were found in a creek of the great isle, which forms this bay; and which for that reason has been called Hammer Island, (*Isle aux Marteaux*).

Here we found abundance of shells, many of them very fine. The shoals offered treasures for the study of Conchology. We met with ten hammer-oysters in one place, and they are said to be a scarce species. [1] The curiosity of some of our people was accordingly raised to a great

Sailor bit by a water-snake.

pitch; but an accident happening to one of our sailors abated their zeal. He was bit in the water by a kind of snake as he was hauling the seine. The poisonous effects of the bite appeared in half an hour's time. The sailor felt an excessive pain all over his body. The spot where he had been bit, which was on the left side, became livid, and swelled visibly. Four or five scarifications extracted a quantity of blood, which was already dissolved. Our people were obliged to lead the patient walking, to prevent his getting convulsions. He suffered greatly for five or six hours together. At last the treacle (*theriaque*) and flower de luce water which had been given him, brought on an abundant perspiration, and cured him.

This accident made every one more circumspect and careful in going into the water. Our Taiti-man curiously observed the patient during the whole course of his sickness. He let us know that in his country were snakes along the sea-shore, which bit the people in the sea, and that every one who was thus bit died of the wound. They have a kind of medicinal knowledge, but I do not believe it is extensive at all. The Taiti-man was surprised to see the sailor return to his work, four or five days after the accident had happened to him. When he examined the productions of our arts, and the various means by which they augment our faculties, and multiply our forces, this islander would often fall into an extatic fit, and blush for his own country, saying with grief, *aoucou Taiti, fy upon Taiti*. However, he did not like to express that he felt our superiority over his nation. It is incredible how far his haughtiness went. We have observed that he was as supple as he was proud; and this character at once shews that he lives in a country where there is an inequality of ranks, and points out what rank he holds there.

Bad weather which persecutes us.

On the 19th in the evening we were ready to sail, but it seemed the weather always grew worse and worse. There was a high south wind, a deluge of rain, with thunder and tempestuous squalls, a great sea in the offing, and all the fishing birds retired into the bay. On the 22nd in the morning, towards half an hour past ten o'clock, we sustained several shocks of an earthquake.

Earthquake.

They were very sensibly felt on board our ships, and lasted about two minutes. During this time the sea rose and fell several times consecutively, which greatly terrified those who were fishing on the rocks, and made them retreat to the boats. It seems upon the whole, that during this season the rains are uninterrupted here. One tempest comes on before the other is gone off, it thunders continually, and the nights are fit to convey an idea of chaotic darkness.

Unsuccessful endeavours to find provisions.

Notwithstanding this, we daily went into the woods in search of thatch palms and cabbage trees, and endeavouring to kill some turtle doves. We divided into several bodies, and the ordinary result of these fatiguing caravans, was, that we returned wet to the skin, and with empty hands.

However, in these last days, we found some mangle-apples, and a kind of fruit called *Prunes de Monbin*. [1]

These would have been of some service to us, had we discovered them sooner. We likewise found a species of aromatic ivy, in which our surgeons believed they had discovered an antiscorbutic quality; at least, the patients who used an infusion of it, and washed with it, found themselves better.

Description of a fine cascade.

We all went to see a prodigious cascade, which furnished the Etoile's brook with water. In vain would art endeavour to produce in the palaces of kings, what nature has here lavished upon an uninhabited spot. We admired the assemblage of rocks, of which the almost regular gradations precipitate and diversify the fall of the waters; with admiration we viewed all these masses, of various figures, forming an hundred different basons, which contain the limpid sheets of water, coloured and shaded by trees of immense height, some of which have their roots in the very reservoirs themselves. Let it suffice that some men exist, whose bold pencil can trace the image of these inimitable beauties: this cascade deserves to be drawn by the greatest painter.

Our situation grows worse every day.

Mean while our situation grew worse every moment of our stay here, and during all the time which we spent without advancing homeward. The number of those who were ill of the scurvy, and their complaints encreased. The crew of the Etoile was in a still worse condition than ours. Every day I sent boats out to sea, in order to know what kind of weather there was. The wind was constantly at south, blowing almost a storm with a dreadful sea. Under these circumstances it was impossible to get under sail, especially as this could not be done without getting a spring upon an anchor that was to be slipped all at once; and in that case it would have been impossible in the offing to hoist in the boats that must have remained to weigh the anchor, which we could not afford to leave behind us. These obstacles determined me to go on the 23d to view a passage between Hammer island and the main land. I found one, through which we could go out with a south wind; hoisting in our boats in the channel. This passage had indeed

We leave Port Praslin.

great inconveniences, and happily we were not obliged to make use of it. It rained without intermission all the eight between the 23d and 24th. At day-break the weather became fair and calm. We immediately weighed our small bower, fastened a warp to some trees, bent a hawser to a stream-anchor, and hove a-peek on the off-anchor. During the whole day we waited for the moment of setting sail; we already despaired of it, and the approach of night would have obliged us to moor again, when at half past five o'clock a breeze sprung up from the bottom of the harbour. We immediately slipt our shore-fast, veered out the hawser of the stream-anchor, from which the Etoile was to set sail after us, and in half an hour's time we were got under sail. The boats towed us into the middle of the passage, where there was wind enough to enable us to proceed without their assistance.

1 It is not known to what genus this plant belongs; a general, but not systematical, description of it may be found in Mr. *Valmont de Bomare's Dictionnaire d'Histoire Naturelle*, article MONBAIN. F.

We immediately sent them to the Etoile to bring her out. Being got two leagues out to sea, we lay-to in order to wait for her, hoisting in our long-boat and small boats. At eight o'clock we began to see the Etoile which was come out of port; but the calm did not permit her to join us till two hours after midnight. Our barge returned at the same time, and we hoisted her in. During night we had squalls and rain. The fair weather returned at day-break. The wind was at S. W. and we steered from E. by S. to N. N. E. turning to northward with the land. It would not have been prudent to endeavour to pass to windward of it: we suspected that this land was New Britain, and all the appearances confirmed us in it. Indeed the lands which we had discovered more to the westward came very close to this, and in the midst of what one might have taken for a passage, we saw separate hummocks, which doubtless joined to the other lands, by means of some low grounds. Such is the picture Dampier gives of the great bay, which he calls St. George's Bay, and we have been at anchor at the, N.E. point of it, as we verified on the first days after our leaving, the port. Dampier was more successful than we were. He took shelter near an inhabited district, which procured him refreshments, and whereof the productions gave him room to conceive great hopes concerning this country, and we, who were as indigent as he was, fell in with a desert, which, instead of supplying all our wants, has only afforded us wood and water.

When I left Port Praslin, I corrected my longitude by that which we obtained from the calculation of the solar eclipse, which we observed there; my difference was about 3° , which I was to the eastward. The thermometer during the stay which we made there, was constantly at 22° or 23° ; but the heat was greater than it seemed to shew. I attribute the cause of this to the want of air, which is common here; this bason being closed in on all sides, and especially on the side of the reigning winds.

CHAP. VI

Run from Port Praslin to the Moluccas; stay at Boera.

WE put to sea again after a stay of eight days, during which time, as we have before observed, the weather had been constantly bad, and the wind almost always southerly. The 25th it returned to S.E. veering round to E. and we followed the direction of the coast at about three leagues distance. It rounded insensibly, and we soon discovered in the offing a succession of islands, one after the other. We passed between them and the main, and I gave them the names of the principal officers. We now no longer doubted that we were coasting New Britain. This land is very high, and seemed to be intersected with fine bays, in which we perceived fires, and other marks of habitations.

Distribution of cloaths to the sailors.

The third day after our departure I caused our field-tents to be cut up, and distributed as trowsers to the two ships companies. We had already, on several occasions made the like distributions of cloathing of all kinds. Without that, how would it have been possible that these poor fellows should be clad during so long a voyage, on which they were several times obliged

Extreme want of victuals.

to pass alternately from cold to hot, and to endure frequent deluges of rain? I had, upon the whole, nothing more to give them, all was exhausted, and I was even forced to cut off another ounce of the daily allowance of bread. Of the little provisions that remained, part was spoiled; and in any other situation all our salt provisions would have been thrown over-board; but we

were under the necessity of eating the bad as well as the good, for it was impossible to tell when our situation would mend. Thus it was our case to suffer at once by what was past, which had weakened us; by our present situation, of which, the melancholy circumstances were every instant repeated before us; and lastly, by what was to come, the indeterminate duration of which was the greatest of all our calamities. My personal sufferings encreased by those of others. However, I must declare that not one suffered himself to be dejected, and that our patience under suffering has been superior to the most critical situations. The officers set the example, and the sea-men never ceased dancing in the evenings, as well in the time of scarcity, as in that of the greatest plenty. Nor has it been necessary to double their pay. [1]

Description of the inhabitants of New Guinea.

We had New Britain constantly in sight till the 3d of August, during which time we had little wind, frequent rain, the currents against us, and the ships went worse than ever. The coast trenched more and more to the westward, and on the 29th in the morning, we found ourselves nearer it than we had yet been: this approach procured us a visit from some periaguas; two came within hail of the frigate, and five others went to the *Etoile*. They carried each of them five or six black men, with frizzled woolly hair, and some of them had powdered it white. They had pretty long beards, and white ornaments round their arms, in form of bracelets. Their nudities were but indifferently covered with the leaves of trees. They are tall, and appeared active and robust. They shewed us a kind of bread, and invited us by signs to go ashore. We desired them to come on board; but our invitations, and even the gift of some pieces of stuff which we threw over-board, did not inspire them with confidence sufficient to make them venture along-side. They took up what was thrown into the water, and by way of thanks one of them with a sling flung a stone, which did not quite reach on board; we would not return them evil for evil, so they retired, striking all together on their canoes, and setting up loud shouts. They without doubt carried their hostilities farther on board the *Etoile*, for we saw our people fire several muskets, which put them to flight. Their periaguas are long, narrow, and with out-riggers; they all have their heads and sterns more or less ornamented with sculptures, painted red, which does honour to their skill.

The next day there came a much greater number of them, who made no difficulty of coming along-side the ship. One of their conductors, who seemed to be the chief, carried a staff about two or three feet long, painted red, with a knob at each end, which, in approaching us, he raised with, both hands over his head, and continued some time in that attitude. All these negroes seemed to be dressed out in their best, some had their woolly hair painted red, others had plumes on their heads, certain seeds in their ears by way of ear-rings, or large white round plates hanging to their necks; some had rings passed through the cartilage of the nose; but an ornament pretty common to them all was bracelets, made of the mouth of a large shell, sawed asunder.

1 M. de B. it seems can never sufficiently elevate the courage and perseverance of his countrymen; on all occasions he praises their disinterestedness, and endeavours to depreciate the merits of the British sailors, by balancing their sufferings with the rewards which an equitable government distributed to them. I have already said something on this subject in a note to our author's Introduction (placed at the head of this work) and shall only add, that I should be apt to suspect M. de B. to envy the British circumnavigators those very rewards which he seems so much to despise, if I could combine such base sentiments with his otherwise generous way of thinking. F.

We were desirous of forming an intercourse, in order to engage them to bring us some refreshments, but their treachery soon convinced us that we could not succeed in that attempt. They strove to seize what was offered them, and would give nothing in exchange. We could scarce get a few roots of yams from them; therefore we left off giving them, and they retired. Two canoes rowed towards the frigate at the beginning of night, but a rocket being fired for some signal, they fled precipitately.

They attack the Etoile.

Upon the whole, it seemed that the visits they made us these two last days had been with no other view than to reconnoitre us, and to concert a plan of attack; for the 31st, at day-break, we saw a swarm of periaguas coming off shore, a part of them passed athwart us without stopping; and all directed their course for the Etoile, which they had no doubt observed to be the smallest vessel of the two, and to keep astern. The negroes made their attacks with stones and arrows, but the action was short, for one platoon disconcerted their scheme, many threw themselves into the sea, and some periaguas were abandoned: from this time we did not see any more of them.

Description of the northern part of New Britain.

The coast of New Britain now ran W. by N. and W. and in this part it became considerably lower. It was no longer that high coast adorned with several rows of mountains; the northern point which we discovered was very low land, and covered with trees from space to space.

1768. August.

The five first days of the month of August were rainy, the weather thick and unsettled, and the wind squally. We discovered the coast only by piecemeal, in the clear intervals, without being able to distinguish the particulars of it: however, we saw enough of it to be convinced that the tides continued to carry us a part of the moderate run we made each day. I then steered N. W. and N. W. by W. to avoid a cluster of islands that lay off the northern extremity of New Britain. The 4th in the afternoon we discovered two islands, which I take to be those that Dampier calls Matthias Island and Stormy or Squally Island. Matthias Island is high and mountainous, and extends to N. W. about eight or nine leagues. The other is not above three or four leagues long, and between the two lies a small isle. An island which we thought we perceived the 5th, at two o'clock in the morning, to the westward, caused us again to stand to the northward. We were not mistaken; for at ten o'clock the fog, which till then had been thick, being dissipated, we saw that island, which is small and low, bearing S. E. by S. The tides then ceased to set to the southward and eastward, which seemed to arise from our having got beyond the northern point of New Britain, which the Dutch have called Cape Salomaswer. We were then in no more than 00° 41' south lat. We had sounded almost every day without finding bottom.

Isle of Anchorets.

We steered west till the 7th, with a pretty fresh gale and fair weather, without seeing land. The 7th in the evening, the sky being very hazy, and appearing at sun-set to be a horizon of land from W. to W. S. W. I determined to steer S. W. by S. for the night; at daylight we steered west again. In the morning we saw a low land, about five or six leagues a-head of us. We steered W. by S. and W. S. W. to pass to the southward of it, and we ranged along it at about a league and a half distance. It was a flat island, about three leagues long, covered with trees, and divided

into several parts, connected together by breakers and sand-banks. There are upon this island a great quantity of cocoa-nut trees, and the sea-shore is covered with a great number of habitations, from which it may be supposed to be extremely populous. The huts were high, almost square, and well covered. They seemed to us larger and handsomer than the huts built with reeds generally are, and we thought we again beheld the houses of Taiti. We discovered a great number of periaguas employed in fishing all round the island; none of them seemed to be disturbed at seeing us pass, from which, we judged that these people, who were not curious, were contented with their fate. We called this island the Isle of Hermits, or Anchorets. Three leagues to the westward of this, we saw another low island from the mast-head.

Archipelago; called by us the *Echequier*.

The night was very dark, and some fixed clouds to the southward made us suppose there was land; and, in fact, at day-light we discovered two small isles, bearing S. S.E. $\frac{1}{4}$. E. at eight or nine leagues distance. We had not yet lost sight of them, at half past eight o'clock, when we discovered another low island, bearing W. S. W. and a little after, an infinite number of little islands extending to W.N. W. and S.W. of this last, which might be about two leagues long; all the others, properly speaking, are nothing but a chain of little flat isles, or keys, covered with wood; which, indeed, was a very disagreeable discovery to us. There was, however, an island separated from the others, and more to the southward, which seemed to us more considerable. We shaped our course between that and the Archipelago of isles, which I called the Chess-board, (*l'Echequier*) and which I wanted to leave to the northward. We were not yet near getting clear of it. This chain discovered, ever since the morning, extended much farther to the south-westward, than we were at that time able to determine.

Danger which we run there.

We endeavoured, as I have observed before, to double it to the southward; but in the beginning of the night, we were still engaged with it, without knowing precisely how far it extended. The weather being continually squally, had never shewn us at once, all that we had to fear; to add to our embarrassment, it became calm in the beginning of the night, and the calm scarce ended at the return of day. We passed the night under continual apprehensions of being cast a-shore by the currents. I ordered two anchors to be got clear, and the cables bitted with a range along the deck, which was almost an unnecessary precaution; for we sounded several times without finding bottom. This is one of the greatest dangers of these coasts; for you have not the resource of anchoring at twice the ship's length from the ledges, by which they are bounded. The weather fortunately continued without squalls; and about midnight a gentle breeze sprung up from the northward, which enabled us to get a little to the south-eastward. The wind freshened in proportion as the sun ascended, and carried us from these low islands; which, I believe, are uninhabited; at least, during the time we were carried near enough to discern them, we distinguished neither fires, nor huts, nor periaguas. The *Etoile* had been, during the night, in still greater danger than us; for she was a very long time without steerage-way, and the tide drew her insensibly towards the shore, when the wind sprung up to her relief. At two o'clock, in the afternoon, we doubled the westernmost of the islands, and steered W. S. W.

We get sight of New Guinea.

The 11th, at noon, being in $2^{\circ} 17'$ south latitude, we perceived, to the southward, a high coast, which seemed to us to be that of New Guinea. Some hours after, we saw it more distinctly. The land is high and mountainous, and in this part extends to the W. N. W. The 12th, at noon, we

were about ten leagues from the nearest land; it was impossible to observe the coast minutely at that distance there: it appeared to us only a large bay, about $2^{\circ} 25'$ south latitude; in the bottom of which, the land was so low, that we only saw it from the mast-head. We also judged from the celerity with which we doubled the land, that the currents were become favourable to us; but in order to determine with any exactness, the difference they occasioned in our estimated run, it would have been necessary to sail at a less distance from the coast. We continued ranging a-long it, at ten or twelve leagues distance; its direction was constantly W. N. W. and its height immense. We remarked particularly two very high peaks, neighbours to each other, which surpassed all the other mountains in height. We called them the Two Cyclops. We had occasion to remark, that the tides set to the N. W. The next day we actually found ourselves further off from the coast of New Guinea; which here tended away west.

The 14th, at break of day, we discovered two islands and a little isle or key, which seemed to be between them, but more to the southward. Their corrected bearings are E. S. E. and W. N. W. They are at about two leagues distance from each other, of a middling height, and not above a league and a half in extent each.

Direction of the winds and currents.

We advanced but little each day. Since our arrival on the coast of New Guinea, we had pretty regularly a light breeze from east to N. E, which began about two or three o'clock in the afternoon, and lasted till about midnight; this breeze was succeeded with a longer or shorter interval of calm, which was followed by the land-breeze, varying from S. W. to S. S. W. and that terminated also towards noon, in two or three hours calm. The 15th, in the morning, we again saw the westmost of the two islands we had seen the preceding evening. We discovered at the same time other land, which seemed to us to be islands, extending from S. E. to W. S. W. very low, over which, in a distant point of view, we perceived the high mountains of the continent. The highest, which we set at eight o'clock in the morning, bearing S. S. E. by compass, detached from the others, we called the *Giant of Moulineau*, and we gave the name of *la Nymphe Alice* to the westmost of the low islands, to the N. W. of Moulineau. At ten in the morning we fell into a race of a tide, where the current seemed to carry us with violence to N. and N. N. E. It was so violent, that till noon it prevented our steering; and as it carried us much into the offing, it became impossible for us to fix a positive judgment of its true direction. The water, in the first tide-line, was covered with the trunks of drift trees, sundry fruits and rock-weeds; it was at the same time so agitated, that we dreaded being on a bank; but sounding, we had no bottom at 100 fathom. This race of a tide seems to indicate either a great river in the continent, or a passage which would here divide New Guinea; a passage whose entrance would be almost north and south. According to two distances, between the sun and moon, observed

Observations compared with the reckoning.

with an octant, by the chevalier du Bouchage and M. Verron our longitude, the 15th at noon, was $136^{\circ} 16' 30''$ east of Paris. My reckoning continued from the determined longitude of Port Praslin; differed from it $2^{\circ} 47'$. We observed the same day $1^{\circ} 17'$ south latitude.

The 16th and 17th it was almost calm; the little wind that did blow, was variable. The 16th, we did not see the land till seven in the morning; and then only from the mast head, extremely high and rugged. We lost all that day in waiting for the *Etoile*, who, overcome by the current, could not keep her course; and the 17th, as she was very far from us, I was obliged to bear down to join her; but this we did not accomplish, till the approach of night, which proved very stormy, with a deluge of rain and frightful thunder. The six following days were all as unpropitious to us; we had rain and calms; and the little wind that did blow was right a-head. It is impossible to

form an idea of this, without being in the situation we were then in. The 17th, in the afternoon, we had seen from S. by W. $\frac{1}{2}$ W. to S. W. $\frac{1}{2}$ W, by compass, at about sixteen leagues distance, a high coast, which we did not lose sight of till night came on. The 18th, at nine in the morning, we discovered a high island, bearing S. W. by W. distance about twelve leagues: we saw it again the next day; and at noon it bore from S. S. W. to S. W. at the distance of 15 or 20 leagues. During these three last days, the currents gave us ten leagues northing: we could not determine what they had helped us in longitude.

We cross the Equator.

The 20th we crossed the line, for the second time the voyage. The currents continued to set us from the land; and we saw nothing of it the 20th or 21st, although we had kept on those tacks by which we approached it most. It became, however, necessary to make the coast, and to range along it, near enough, so as not to commit any dangerous error, which might make us miss the passage into the Indian Sea, and carry us into one of the gulphs of Gilolo. The 22nd, at break of day, we had sight of a higher coast than any part of New Guinea that we had yet seen. We steered for it, and at noon we set it, when it bore from S. by E. $\frac{1}{2}$ E. to S. W. where it did not seem to terminate. We passed the line for the third time.

Cross the line again.

The land ran W. N. W. and we approached it, being determined not to quit it any more till we arrived at its extremity, which geographers call Cape Mabo. In the night we doubled a point, on the other side of which the land, still very high, trenched away W. by S. and W. S. W. The 23d at noon, we saw an extent of coast, of about twenty leagues; the westmost part of which bore from us S. W. thirteen or fourteen leagues.

We were much nearer two low islands, covered with wood, distant from each other about four leagues. We stood within about half a league; and whilst we waited for the Etoile, who was a

Unsuccessful attempt on shore.

great distance from us, I sent the chevalier de Suzannet, with two of our boats armed, to the northermost of the two islands. We thought we saw some habitations there, and were in hopes of getting some refreshments. A bank, which lies the length of the island, and extends even pretty far to the eastward, obliged the boats to take a large circuit to double it. The chevalier de Suzannet found neither dwellings, inhabitants, nor refreshments. What had seemed to us at a distance to form a village, was nothing but a heap of rocks, undermined and hollowed into caverns by the sea. The trees that covered the island, bore no fruits proper to be eaten by man. We buried an inscription here. The boats did not return on board till ten o'clock at night, when the Etoile had joined us. The constant sight of the land shewed us that the currents set here to the N. W.

Continuation of New Guinea

After hoisting in our boats, we drove to keep the shore on board, as well as the winds, which were constantly at S. and S. S. W. would permit us. We were obliged to make several boards, with an intent to pass to windward of a large island, which we had seen at sun-set, bearing W. and W. by N. The dawn of day surprised us, still to leeward of this island. Its eastern side, which may be about five leagues long, runs nearly N. and S. and off the south point lies a low island of small extent. Between it and the coast of New Guinea, which runs here nearly S. W.

by W. there appeared a large passage, the entrance of which, of about eight leagues, lay N. E. and S. W. The wind blew out of it, and the tide set to the N. W. it was not possible to gain in turning to windward against wind and sea; but I strove to do it till nine in the morning. I saw with concern that it was fruitless, and resolved to bear away, in order to range the northern side of the island, abandoning with regret a passage, which I thought a fine one, to extricate me out of this everlasting chain of islands.

Hidden danger.

We had two successive alarms this morning. The first time they called from aloft, that they saw a long range of breakers a-head, and we immediately got the other tacks on board. These breakers, at length, more attentively examined, turned out to be the rippling of a violent tide, and we returned to our former course. An hour after, several persons called from the fore-castle, that they saw the bottom under us; the affair was pressing; but the alarm was fortunately as short as it had been sudden. We should even have thought it false, if the Etoile, who was in our wake, had not perceived the same shoal for near two minutes. It appeared to them a coral-bank. Almost north and south of this bank, which may have still less water in some places, there is a sandy creek, in which are built some huts, surrounded with cocoa-trees. This mark may so much the better serve for a direction, as hitherto we had not seen any traces of habitations on this coast. At one o'clock in the afternoon, we doubled the N. E. point of the great island; which from thence extended W. and W. by S. near 20 leagues. We were obliged to hug our wind to coast it; and it was not long ere we perceived other islands, bearing W. and W. by N. We saw one at sun-set, which bore even N. E. by N. to which there joined a ledge, which seemed to extend as far as N. by W. thus were we once more hemmed in.

Loss of the master of the ship.

This day we lost our first master, called Denys, who died of the scurvy. He was a native of St. Malo's, and aged about fifty years; most of them spent in the king's service. The sentiments of honour, and extensive knowledge, that distinguished him in his important charge, caused him to be universally regretted among us. Forty-five other persons were afflicted with the scurvy; lemonade and wine only suspended its fatal progress.

Difficult course.

We spent the night upon our tacks; and the 25th, at day-light, found ourselves surrounded with land. Three passages presented themselves to us; one opened to the S. W. the second to W. S. W. and the third almost east and west. The wind was fair for none but the east; and I did not approve of it, as I did not doubt that it would carry us into the midst of the isles of Papua. It was necessary to avoid falling any farther to the northward; for fear, as I have before observed, we should be imbayed in one of the gulphs, on the east side of Gilolo. The essential means for getting out of these critical parts, was therefore to get into a southern latitude; for on the other side of the S. W. passage we observed to the southward an open sea, to the utmost extent of our view, therefore I resolved to ply to windward, in order to gain that outlet. All these islands, which inclosed us, are very steep, of a moderate height, and covered with trees. We did not perceive the least appearance of their being inhabited.

Fourth passage of the line.

At eleven o'clock in the afternoon, we sounded 45 fathom, a sandy bottom; this was one resource. At noon we observed in $00^{\circ} 5' N.$ latitude, having crossed the line a fourth time. At six in the evening we were so far to windward, as to be able to fetch the W. S. W. passage, having gained about three leagues by working the whole day. The night was more favourable, thanks to the moon-shine, which enabled us to turn to windward between the rocks and islands. The current, which had been against us whilst we were passing by the two first passages, likewise became favourable for us as soon as we opened the S. W. passage.

Description of the channel through which we at last passed.

The channel through which we at last passed out this night, may be about three leagues broad. It is bounded to the westward by a cluster of pretty high islands and keys. Its eastern side, which at first sight we took for the westmost point of the great island, is also nothing but a heap of small islands and rocks, which, at a distance, seemed to form only one body; and the separations between these islands shew at first the appearance of fine bays; this is what we discovered in each tack, that we made towards that shore. It was not till half past four o'clock in the morning, that we were able to double the southmost of the little islands of the new passage, which we called the *French Passage*. We deepened our water in the midst of this Archipelago of Islands, in advancing to the southward. Our soundings were from 55 to 75 and 80 fathom, grey sand, ooze, and rotten shells. When we were entirely out of the channel, we sounded and found no bottom. We then steered S. W.

The 26th, at break of day, we discovered an island, bearing S. S. W. and a little after another bearing W. N. W. At noon we saw no more of the labyrinth of islands we had left, and the meridian altitude gave us $00^{\circ} 23'$ south latitude.

Pass the line a fifth time.

This was the fifth time of our passing the line. We continued close on a wind, with the larboard tacks on board, and in the afternoon we had sight of a small island in the S. E. The next day, at sun-rise, we saw it somewhat elevated, bearing N. E. about nine or ten leagues distance, seeming to extend N. E. and S. W. about two leagues. A large hummock, very steep, and of a remarkable height, which we named Big Thomas, (*Gros Thomas*) shewed itself at ten in the forenoon. At its southern point there is a small island, and there are two at the northern one. The currents ceased setting us to the northward; we had, on the contrary, a difference to the southward. This circumstance, together with our observed latitude, which made us to the southward of Cape Mabo, totally convinced me that we were at length entered into the Archipelago of the Moluccas.

Discussion concerning Cape Mabo.

Let me now ask, which this Cape Mabo is, and: where it is situated? Some make it the Cape, which, to the northward, terminates the western part of New Guinea. Dampier and Woods Rogers place it the former, in one of the gulphs of Gilolo in $30' S.$ lat. The second, eight leagues at farthest from this great island. But all this part is an extensive Archipelago of little isles; which, on account of their number, were called the Thousand Isles, by admiral Roggewein, who passed through them in 1722. Then in what manner does this Cape Mabo, which is in the neighbourhood of Gilolo, belong to New Guinea? Where shall we place it if (as there is so much reason to believe) all New Guinea itself is a heap of great islands? the various channels

between which are as yet unknown. It must certainly belong to the westmost of these considerable isles.

Entrance into the archipelago of the Moluccas.

On the 27th, in the afternoon, we discovered five or six islands, bearing from W. S. W. $\frac{1}{4}$ W. to W. N. W. by compass. During night we kept the S. S. E. tack; so that we did not see them again the 28th in the morning. We then perceived five other little isles, which we stood in for. At noon they bore from S. S. W. 1° W. to S. 10° W. at the distance of two, three, four, and five leagues. We still saw Big Thomas bearing N. E. by E. $\frac{1}{4}$ E. about five leagues. We likewise got sight of another island, bearing W. S. W. seven or eight leagues distant. During the last twenty-four hours we felt several strong tides, which seemed to set from the westward. However, the difference between my reckoning, and the observation at noon, and at the setting of the bearings gave us ten or eleven miles to S. W. by S. and S. S. W. At nine o'clock in the morning I ordered the Etoile to mount her guns, and sent her cutter to the S. W. isles, in order to see whether there was any anchorage, and whether these isles had any interesting productions.

Meeting with a negro.

It was almost a calm in the afternoon, and the boat did not return before nine o'clock in the evening. She had landed on two isles, where our people had found no signs of habitation, or cultivation, and not even any kind of fruits. They were going to return, when, to their great surprise, they saw a negro, quite by himself, coming towards them in a periagua, with two outriggers. In one ear he had a golden ring, and his arms were two lances. He came up to our boat without shewing any marks of fear or surprize. Our people asked him for something to eat and to drink, and he offered them water, and a small quantity of a sort of flour, which seemed to be his ordinary food. Our men gave him a handkerchief, a looking-glass, and some other trifles of that sort. He laughed when he received these presents, and did not admire them. He seemed to know the Europeans, and we thought that he might possibly be a run-away negro from one of the neighbouring islands where the Dutch have settlements; or that he had perhaps been sent out a-fishing. The Dutch call these islands the Five Isles, and send some people to visit them from time to time. They told us that they were formerly seven in number, but that two have been sunk by earthquakes, which happen frequently in these parts. Between these isles there is a prodigious current, without any anchorage. The trees and plants are almost all the same here as upon New Britain. Our people took a turtle here of about two hundred weight.

Sight of Ceram.

From this time we continued to meet with violent tides, which set to the southward, and we kept the course which came nearest to their direction. We sounded several times without finding bottom, and till the 30th in the afternoon, we got sight of no other land than a single isle to the westward, ten or twelve leagues from us; but then we saw a considerable land bearing south at a great distance. The current, which was of more service to us than the wind, brought us nearer to it during night, and on the 31st at day-break we were about seven or eight leagues from it. This was the Isle of Ceram. Its coast, which is partly woody and partly cleared, runs nearly east and west, and we could not see it terminated. This isle is very high; prodigious mountains rise on it from space to space, and the numerous fires which we saw on all sides of it, indicate its being very populous. We passed the day and the next night in ranging the northern coast of this isle, making our tacks in order to gain to the westward, and double its westernmost point. The current was favourable to us, but the wind was scant.

Observations on the monsoons in these parts.

I shall here take an opportunity from the contrary winds we had now met with for a long time, to observe, that in the Moluccas, they call the westerly monsoon the northern one, and the easterly monsoon the southern one; because, during the former, the winds blow more generally from N. N. W. than from W. and during the latter, they come most frequently from S. S. E. These winds likewise prevail in the isles of Papua, and on the coasts of New Guinea; we got this information by fatal experience, having employed thirty-six days to make four hundred and fifty leagues.

1768. September.

The first of September, at the dawn of day, we were at the entrance of a bay, in which we saw several fires. Soon after we perceived two vessels under sail, built in form of the Malay boats. We hoisted a Dutch ensign and pendent, and fired a gun, by which I committed a fault without knowing it. We have since learnt that the inhabitants of Ceram are at war with the Dutch, and that they have expelled the latter from almost every part of their isle. Therefore we made a board into the bay without success, the boats retreated on shore, and we profited of the fresh breeze to proceed on our course. The shore at the bottom of the bay is low and level, surrounded by high mountains; and the bay itself contains several islands. We were obliged to steer W. N. W. in order to double a pretty large island, at the point of which you see a little isle or key, and a sand bank, with some breakers which seem to extend a league out to sea. This island is called *Bonao*; it is divided into two by a very narrow channel. When we had doubled it, we steered W. by S. till noon.

It blew very fresh from S. S. W. to S. S. E. and we plied the remainder of the day between *Bonao*, *Kelang*, and *Manipa*, endeavouring to make way to the S, W. At ten o'clock in the evening we discovered the lands of the isle of Boero, by means of the fires which burnt on it; and as it was my intention to put in there, we passed the night on our tacks, in order to keep within reach, and if possible to the windward of it.

Project for our safety.

I knew that the Dutch had a weak factory on this isle, which was however abundant in refreshments. As we were perfectly ignorant of the situation of affairs in Europe, it was not prudent to venture to learn the first intelligence concerning them among strangers, but at a place where we were almost the strongest.

Sad condition of the ship's companies.

Excessive marks of joy accompanied our discovering the entrance of the gulph of Cajeli, at break of day. There the Dutch have their settlement; there too was the place where our greatest misery was to have an end. The scurvy had made cruel havock amongst us after we had left Port Praslin; no one could say he was absolutely free from it, and half of our ship's companies were not able to do any duty. If we had kept the sea eight days longer, we must have lost a great number of men, and we must all have fallen sick. The provisions which we had now left were so rotten, and had so cadaverous a smell, that the hardest moments of the sad days we passed, were those when the bell gave us notice to take in this disgusting and unwholesome food. I leave every one to judge how much this situation heightened in our eyes the beautiful aspect of the coasts of Boero. Ever since midnight, a pleasant scent exhaled from the aromatic plants with which the Moluccas abound, had made an agreeable impression upon our organs of smell,

several leagues out at sea, and seemed to be the fore-runner which announced the end of our calamities to us. The aspect of a pretty large town, situated in the bottom of the gulph; of ships at anchor there, and of cattle rambling through the meadows, caused transports which I have doubtless felt, but which I cannot here describe.

We were obliged to make several boards before we entered into this gulph, of which the northern point is called the point of *Lissatetto*, and that on the S. E. side, point Rouba. It was ten o'clock before we could stand in for the town. Several boats were sailing in the bay; we hoisted Dutch colours, and fired a gun, but not one of them came along-side; I then sent a boat to sound a-head of the ship. I was afraid of a bank which lies on the S. E. side of the gulph. At half an hour past noon, a periagua conducted by Indians came near the ship; the chief person asked us in Dutch who we were, but refused to come on board. However, we advanced, all sails set, according to the signals of our boat, which sounded a-head. Soon after we saw the bank of

Shoal of the gulph of Cajeli.

which we had dreaded the approach. It was low water, and the danger appeared very plain. It is a chain of rocks mixed with coral, stretching from the S. E. shore of the gulph to within a league of point Rouba, and its extent from S. E. to N. W. is half a league. About four times the length of a boat from its extremities, you have five or six fathoms of water, a foul coral bottom, and from thence you immediately come into seventeen fathoms, sand and ooze. Our course was nearly S. W. three leagues, from ten o'clock to half past one, when we anchored opposite the factory, near several little Dutch vessels, not quite a quarter of a league off shore. We were in twenty-seven fathoms, sand and ooze, and had the following bearings:

Point Lissatetto, N. 4° E. two leagues.

Point Rouba, N. E. 2° E. half a league.

A peninsula, W. 10° N. three quarters of a league.

The point of a shoal, which extends above half a league to the offing from the peninsula. N. W. by W.

The flag of the Dutch factory, S. by W. $\frac{1}{4}$ W.

We put in at Boero.

The Etoile anchored near us more to the W. N. W. We had hardly let go our anchor, when two Dutch soldiers, without arms, one of them speaking French, came on board to ask me on the part of the chief of the factory, what motives brought us to this port, when we could not be ignorant that the ships of the Dutch India company alone had the privilege of entering it. I sent them back with an officer to declare to the chief, that the necessity of taking in provisions forced us to enter into the first port we had met with, without permitting us to pay any regard to the treaties that exclude our ships from the ports in the Moluccas, and that we should leave the harbour as soon as he should have given us what help we stood most in need of.

Embarrassment of the chief.

The two soldiers returned soon after, to communicate to me an order, signed by the governor of Amboina, upon whom the chief of Boero immediately depends, by which the latter is expressly forbid to receive foreign ships into his port.

The chief at the same time begged me to give him a written declaration of my motives for putting in here, in order that he might thereby justify his conduct in receiving us here, before his superior, to whom he would send the above declaration. His demand was reasonable, and I satisfied it by giving him a signed deposition, in which I declared, that having left the

Malouines, and intending to go to India by the South Seas, the contrary monsoon, and the want of provisions, had prevented our gaining the Philippines, and obliged us to go in search of the indispensable supplies at the first port in the Moluccas, and that I desired him to grant me these supplies in consideration of humanity, the most respectable of obligations.

Good reception he gives us.

From this moment we found no difficulties; the chief having done his duty for his company, happily acted a very good natured character, and offered us all he had in as easy a manner as if he had every thing in his disposal. Towards five o'clock I went on shore with several officers, in order to pay him a visit. Notwithstanding the embarrassment which our arrival had caused him, he received us extremely well. He even offered us a supper, and we did not fail to accept of it. When he saw with what pleasure and avidity we devoured it, he was better convinced than by our words, that we had reason to complain of being pinched by hunger. All the Hollanders were struck with the highest degree of surprise, and none of them durst eat any thing for fear of wronging us. One must have been a sailor, and reduced to the extremities which we had felt for several months together, in order to form an idea of the sensation which the sight of greens and of a good supper produced in people in that condition. This supper was for me one of the most delicious moments of my life, especially as I had sent on board the vessels what would afford as good a supper as ours to every one there.

We agreed that we should have venison every day to supply our companies with fresh meat, during their stay; that at parting we were to receive eighteen oxen, some sheep, and almost as much poultry as we should require. We were obliged to supply the want of bread with rice, which the Dutch live upon. The islanders live upon sago bread, which they get out of a palm of that name; this bread looks like the cassava. We could not get great quantities of pulse, which would have been extremely salutary to us. The people of this country do not cultivate them. The chief was so good as to give some to our sick from the company's garden.

Policy of the company.

Upon the whole, every thing here, directly or indirectly, belongs to the company; neat and small cattle, grain, and victuals of all kinds. The company alone buys and sells. The Moors indeed have sold us fowls, goats, fish, eggs, and some fruit, but the money which they got for them will not long remain in their hands. The Dutch know how to get at it, by selling them very coarse kinds of cloth, which however bear a very great price. Even stag-hunting is not allowed to every one, for the chief alone has a right to it. He gives his huntsmen three charges of powder and shot, in return they are obliged to bring him two deer, for which they are paid six-pence a-piece. If they bring home only one, he deducts from what is due to them the value of one charge of powder and shot.

On the 3d in the morning we brought our sick on shore, to ly there during our stay. We likewise daily sent the greatest part of the crews on shore, to walk about and divert themselves. I got the slaves of the company, whom the chief hired to us by the day, to fill the water of both ships, and to transport every thing from the shore to the ships, &c. The Etoile profited of this time to adjust the caps of her lower masts, which had much play. We had moored at our arrival, but from what the Dutch told us of the goodness of the bottom, and of the regularity of the land and sea breezes; we weighed our small bower. Indeed, we saw all the Dutch vessels riding at single anchor.

During our stay here we had exceeding fine weather. The thermometer generally rose to 23⁰ during the greatest heat of the day; the breeze from N. E. and S. E. blowing in day time, charged in the evening; it then came from the shore, and the nights were very cool. We had an

opportunity of seeing the interior parts of the isle; we were allowed to go out a stag-hunting several times, in which we took a great deal of pleasure. The country is charmingly interspersed with woods, plains, and hillocks, between which the vallies are watered by fine rivulets. The Dutch have brought the first stags hither, which have multiplied prodigiously, and are delicious eating. Here are likewise wild boars in great plenty, and some species of wild fowls.

Particulars concerning the isle of Boero.

The extent of the isle of Boero or Burro from east to west is reckoned at eighteen leagues, and from north to south at thirteen. It was formerly subject to the king of Ternate, who got a tribute from thence. The principal place in it is Cajeli, situated at the bottom of the gulph of that name, in a marshy plain, stretching about four miles between the rivers *Soweill* and *Abbo*. The latter is the greatest river in the whole island, and its water is always very muddy. The landing is very inconvenient here, especially at low water, during which the boats are obliged to stop at a good distance from the beach. The Dutch Settlement, and fourteen Indian habitations, formerly dispersed in several parts of the isle, but now drawn together round the factory, form the village or town of Cajeli. At first, the Dutch had built a fort of stone here; it was blown up by accident in 1689, and since that time they have contented themselves with a simple enclosure of pallisadoes, mounted with six small cannon, forming a kind of battery; this is called Fort of Defence, and I took this name for a sort of ironical appellation. The garrison is commanded by the chief, and consists of a serjeant and twenty-five men; on the whole island are not above fifty white people. Some habitations of black people are dispersed on it, and they cultivate rice. Whilst we were here, the Dutch forces were encreased by three vessels, of which, the biggest was the *Draak*, a snow, mounting fourteen guns, commanded by a Saxon, whose name was *Kop-le-Clerc*; she was manned by fifty Europeans, and destined to cruise among the Moluccas, and especially to act against the people of Papua and Ceram.

Account of the natives of the country.

The natives of the country are of two classes, the Moors (*Maures*) and the Alfourians (*Alfouriens*). The former live together under the factory, being entirely submitted to the Dutch, who inspire them with a great fear of all foreign nations. They are zealous observers of the Mahomedan religion, that is, they make frequent ablutions, eat no pork, and take as many wives as they can support, being very jealous of them, and keeping them shut up. Their food is sago, some fruits, and fish. On holidays they feast upon rice, which the company sells them. Their chiefs or *orencaies* are always about the Dutch chief, who seems to have some regard for them, and by their means keeps the people in order. The company have had the art of sowing the seeds of a reciprocal jealousy among these chiefs; this allures them of a general slavery, and the police which they observe here with regard to the natives, is the same in all their other factories. If one chief forms a plot, another discovers it, and immediately informs the Dutch of it.

These moors are, upon the whole, ugly, lazy, and not at all warlike. They are greatly afraid of the Papous, or inhabitants of Papua; who come sometimes in numbers of two or three hundred to burn their habitations, and to carry off all they can, and especially slaves. The remembrance of their last visit, made about three years ago, was still recent. The Dutch do not make slaves of the natives of Boero; for the company gets those, whom they employ that way, either from Celebes, or from Ceram, as the inhabitants of these two isles sell each other reciprocally.

Wise people.

The Alfourians are a free people, without being enemies of the company. They are satisfied with being independent, and covet not those trifles, which the Europeans sell or give them in exchange for their liberty. They live dispersed in the inaccessible mountains, which the interior, parts of this isle contain. There they subsist upon sago, fruits, and hunting. Their religion is unknown; it is said, that they are not Mahomedans; for they feed hogs, and likewise eat them. From time to time the chiefs of the Alfourians come to visit the Dutch chief; they would do as well to stay at home.

Productions of the Boero.

I do not know whether there were formerly any spice plantations on this isle but be this as it will, it is certain that there are none at present. The company get from this station nothing but black and white ebony, and some other species of wood, which are much in request with joiners. There is likewise a line pepper plantation; the sight of which has convinced us, that pepper is common on New Britain, as we conjectured before. Fruits are but scarce here; there are cocoa-nuts, bananas, shaddocks, some lemons, citrons, bitter-oranges, and a few pine-apples. There grows a very good sort of barley, called *ottong*, and the *sago-borneo*, of which they make soups, which seemed abominable to us. The woods are inhabited by a vast number of birds of various species, and beautiful plumage; and among them are parrots of the greatest beauty. Here is likewise that species of wild cat, [1] which carries its young in a bag under its belly; the kind of bat, whose wings are of a monstrous extent; [2] enormous serpents, which can swallow a whole sheep at once, and another species of snakes, which is much more dangerous; because it keeps upon trees, and darts into the eyes of those who look into the air as they pass by. No remedy is as yet found against the bite of this last kind; we killed two of them in one of our stag-hunts.

The river Abbo, of which the banks are almost everywhere covered with trees of a thick foliage, is infested by enormous crocodiles, which devour men and beasts. They go out at night; and there are instances of their taking men out of their periaguas. The people keep them from coming near, by carrying lighted torches. The shores of Boero do not furnish many fine shells. Those precious shells, which are an article of commerce with the Dutch, are found on the coast of Ceram, at Amblaw, and at Banda, from whence they are sent to Batavia. At Amblaw they likewise find the most beautiful kind of cockatoes.

Good proceedings of the resident on our account.

Henry Ouman, the chief at Boero, lives there like a sovereign. He has a hundred slaves for the service of his house, and all the necessaries and conveniencies of life in abundance.

1 M. de Busson has denied the existence of the *Opossum* or *Didelphis*, Linn, in East India, though Piso, Valentyn, and Le Brun have seen it in the Moluccas and in Java: M. de Busson's own countryman, M. de Bougainville, now likewise asserts their being upon Boero, in a manner so little equivocal, that there can be no doubt of the *Opossum* genus inhabiting the East Indies, though the particular species is unknown. F.

2 This is the great *Bat of Ternate*, Penn. Syn. Quad. p. 359. and Linnæus's *Vespertilio Vampyrus*. F.

He is an Under-Merchant ; [1] and this degree is the third in the company's service. This man was born at Batavia, and has married a Creole from Amboina.

I cannot sufficiently praise his good behaviour towards us. I make no doubt, but the moment when we entered this port, was a critical one for him; but he behaved like a man of sense. After he had done what his duty to his superiors required, he did what he could not be exempted from, with a good grace, and with the good manners of a frank and generous man. His house was ours; we found something to eat and drink there at all times; and I think this kind of civility was as good as any other, especially to people who still felt the consequences of famine. He gave us two repasts of ceremony; the good order, elegance, and plenty of which, quite surprised us in so inconsiderable a place. The house of this honest Dutchman was very pretty, elegantly furnished, and built entirely in the Chinese taste. Every thing is so disposed about it as to make it cool; it is surrounded by a garden, and a river runs across it. You come to it from the sea-shore, through an avenue of very great trees. His wife and daughter were dressed after the Chinese fashion, and performed the honours of the house very well. They pass their time in preparing flowers for distillation in making nosegays, and getting some betel ready. The air which you breathe in this agreeable house is most deliciously perfumed, and we should all very willingly have made a long stay there: how great was the contrast between this sweet and peaceful situation, and the unnatural life we had now led for these ten months past?

Conduct of Aotourou.

I must mention what impression the sight of this European settlement made upon Aotourou. It will easily be conceived that his surprise must have been great at seeing men dressed like ourselves, houses, gardens, and various domestick animals in abundance, and great variety. He could not be tired with looking at these objects, which were new to him. He valued above all that hospitality, which was here exercised with an air of sincerity and of acquaintance. As he did not see us make any exchanges, he apprehended that the people gave us every thing without being paid for it. Upon the whole, he behaved very sensibly towards the Dutch. He began with giving them to understand, that in his country he was a chief, and that he had undertaken this voyage with his friends for his own pleasure. In the visits, at table, and in our walks, he endeavoured to imitate us exactly. As I had not taken him with me on the first visit which we made, he imagined it was because his knees are distorted, and absolutely wanted some sailors to get upon them, to set them to rights. He often asked us, whether Paris was as fine as this factory?

Goodness of the provisions there.

On the 6th, in the afternoon, we had taken on board our rice, cattle, and all other refreshments. The good chief's bill was of a considerable amount; but we were assured, that all the prices were fixed by the company, and that he could not depart from their tariff. The provisions were indeed excellent; the beef and mutton are better by a great deal, than in any other hot country I know; and the fowls are most delicious there. The butter of Boero has a reputation in this country, which our sailors from Bretany found it had not lawfully acquired.

The 7th, in the morning, I took on board the sick people, and we made every thing ready, in order to set sail in the evening with the land-breeze. The fresh provisions, and the salubrious air of Boero, had done our sick much good. This stay on shore, though it lasted only six days, brought them so far, that they could be cured on board, or at least prevented from growing worse, by means of the refreshments which we could now give them.

1 *Sous-Marchande.*

Observations on the monsoons and currents.

It would doubtless have been very desirable for them, and even for the healthy men, to have made a longer stay here; but the end of the eastern monsoon being at hand, pressed us to set sail for Batavia. If the other monsoon was once set in, it became impossible for us to go there; because at that time, besides having the winds contrary to us, we had likewise the currents against us, which follow the direction of the reigning monsoon. It is true, they keep the direction of the preceding monsoon for near a month after it; but the changing of the monsoon, which commonly happens in October, may come a month sooner, as well as a month later. In September there is little wind: in October and November still less; that being the season of calms. The governor of Amboina chooses at this season to go his rounds to all the isles which depend upon his government. June, July, and August, are very rainy. The eastern monsoon generally blows S. S. E. and S. S. W. to the north of Ceram and Boero; in the isles of Amboina and Bandas it blows E. and S. E. The western monsoon blows from W. S. W. and N. W. The month of April is the term when the western winds cease blowing; this is the stormy monsoon, as the easterly one is the rainy monsoon. Captain Clerk told us, that he had in vain cruized before Amboina, in order to enter it, during the whole month of July: he had there suffered continual rains, which had made all his people sick. It was at the same time that we were so well soaked in Port Praslin.

Remarks on the earthquakes.

There had been three earthquakes this year at Boero, almost close after each other, on the 7th of June, the 12th and on the 17th of July. It was the 22d of the same month that we felt one on New Britain. These earthquakes have terrible consequences for navigation in this part of the world. Sometimes they sink known isles and sand-banks, and sometimes they raise some, where there were none before; and we gain nothing by such accidents. Navigation would be much safer, if every thing remained as it is.

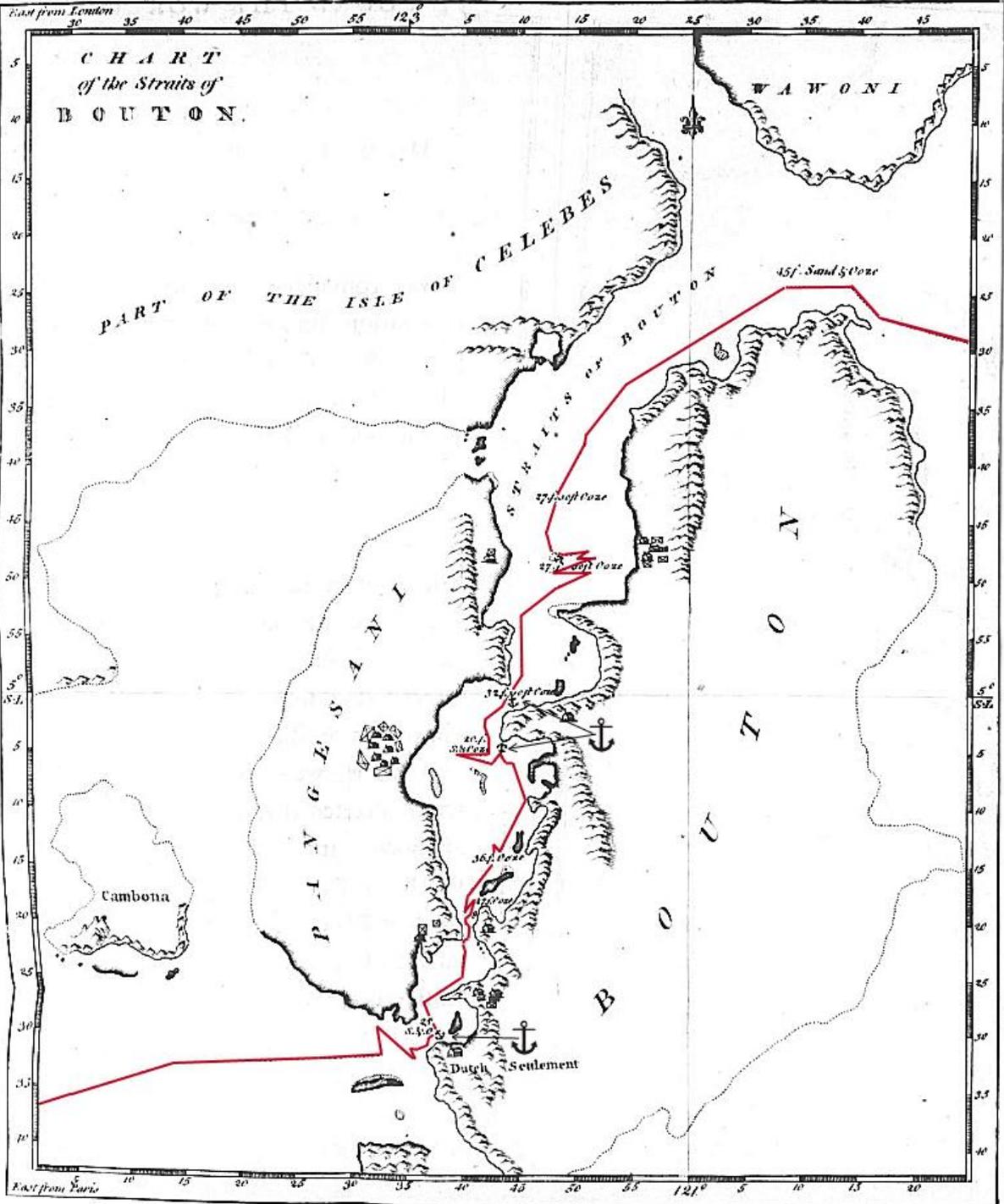
We leave Boero.

On the 7th afternoon, all our people were on board, and we only waited for the land-breeze, in order to set sail. It was not felt till eight o'clock at night. I immediately sent a boat with a light to anchor at the point of the bank, which lies on the S. E. side, and we began to make every thing ready for setting sail. We had not been misled, when we were informed that the bottom was very good in this anchorage. We made fruitless efforts at the capstan for a long time; at last the voyal broke, and we could only by the help of our winding-tackle get our anchor out of this strong ooze, in which it was buried. We did not get under sail before eleven o'clock. Having doubled the point of the bank, we hoisted in our boats, as the Etoile did hers, and we steered successively N. E. N. E. by N. and N. N. E. in order to go out of the gulph of Cajeli.

Astronomical observations.

During our stay here, M. Verron had made several observations of distances on board; the mean result of which enabled him to determine the longitude of this gulph; and places it $2^{\circ} 53'$ more to the westward than our reckoning, which we had followed after determining the longitude on New Britain. Upon the whole, though we found the true European date current in the Moluccas, from which it was very natural, we had lost a day by going round the world with the sun's course, yet I shall continue the date of our journals, only mentioning, that instead of Wednesday the 7th, they reckoned Thursday the 8th in India. I shall not correct my date, till I come to the isle of France.

Pl. 1. to face page 381.



CHAP. VII

Run from Boero to Batavia.

1768. September. Difficulties of the navigation in the Moluccas,

ALTHOUGH I was convinced that the Dutch represent the navigation between the Moluccas as much more dangerous than it really is, yet I well knew that it was full of shoals and difficulties. The greatest difficulty for us was to have no accurate chart of these parts of India, the French charts of them being more proper to cause the loss of ships than to guide them. I could get nothing but vague information, and imperfect instructions from the Dutch at Boero. When we arrived there, the Draak was going to leave the port in a few days, in order to bring an engineer to Macassar, and I intended to follow her to that place; but the resident gave orders to the commander of this snow to stay at Cajeli till we were gone. Accordingly we set sail alone, and I directed my course so as to pass to the northward of Boero, and to go in search of the straits of Button, which the Dutch call Button-straat.

Course which we take.

We ranged the coast of Boero at the distance of about a league and a half, and the currents did not seem to make any sensible difference till noon. On the 8th in the morning we perceived the isles of Kilang and Manipa. From the low land which you find after going out of the gulph of Cajeli, the coast is very high, and runs W. N. W. and W. by N. On the 9th in the morning we got sight of the isle of Xullabessie; it is a very inconsiderable one, and the Dutch have a factory there, in a redoubt, called *Cleverblad*, or the Clover-leaf. The garrison consists of a serjeant and twenty-five men, under the command of M. Arnoldus Holtman, who is only book-keeper. This isle formerly was one of the dependences of the government of Amboina, at present it belongs to that of Ternate. Whilst we ran along Boero we had little wind, and the settled breezes almost the same as in the bay. The currents during these two days set us near eight leagues to the westward. We determined this difference with precision enough, on account of the frequent bearings which we took. On the last day they likewise set us a little to the southward, which was verified by the meridian altitude observed on the 10th.

We had seen the last lands of Boero on the 9th, at sun-setting; we found pretty fresh S. and S. S. E. winds out at sea, and we passed several very strong races of a tide. We steered S. W. whenever the winds permitted, in order to fall in with the land between Wawoni and Button, as I intended to pass through the straits of that the morning we perceived the isles of Kilang and Manipa. From the low land which you find after going out of the gulph of Cajeli, the coast is very high, and runs W. N. W. and W. by N. On the 9th in the morning we got sight of the isle of Xullabessie; it is a very inconsiderable one, and the Dutch have a factory there, in a redoubt, called *Cleverblad*, or the Clover-leaf. The garrison consists of a serjeant and twenty-five men, under the command of M. Arnoldus Holtman, who is only book-keeper. This isle formerly was one of the dependences of the government of Amboina, at present it belongs to that of Ternate. Whilst we ran along Boero we had little wind, and the settled breezes almost the same as in the bay. The currents during these two days set us near eight leagues to the westward. We determined this difference with precision enough, on account of the frequent bearings which we took. On the last day they likewise set us a little to the southward, which was verified by the meridian altitude observed on the 10th.

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whenever the winds permitted, in order to fall in with the land between Wawoni and Button, as I intended to pass through the straits of that name It is pretended that during this season it is dangerous to keep to the eastward of Button, that one runs the risk of being thrown upon the coast by the winds and currents, and that then it is necessary, in order to lay it again, to wait for

Nautical advice.

the western monsoons being perfectly set in. This I have been told by a Dutch mariner, but I will not answer for the truth of it. I will however positively assert that the passage of the straits is infinitely preferable to the other course, either to the northward or to the southward of the shoal called Toukanbessie: this latter being full of viable and hidden dangers, which are dreaded even by those who know the coast.

On the 10th in the morning, one Julian Launai, taylor, died of the scurvy. He began already to grow better, but two excesses in drinking brandy carried him off.

Sight of the straits of Button.

The 11th, at eight o'clock in the morning, we saw the land, bearing from W. by S. to S. S. W. $\frac{1}{4}$ W. At nine o'clock we found that it was the isle of Wawoni, which is high, especially in its middle: at eleven o'clock we discovered the northern part of Button. At noon we observed in $4^0 6'$ of south lat. The northernmost point of the isle of Wawoni then bore W. $\frac{1}{2}$ N. its southernmost point S. W. by W. 4^0 W. eight or nine leagues distant, and the N. E. point of Button, S. W. $\frac{1}{2}$ W. about nine leagues distant. In the afternoon we stood within two leagues of Wawoni, then stood out into the offing, and kept plying all night, in order to keep to windward of the strait of Button, and be ready to enter them at day-break. The 12th, at six o'clock in the morning, it bore between N. W. by W. and W. N. W. and we stood in for the north point of Button. At the same time we hoisted out our boats, and kept them in tow. At nine o'clock we opened the straits, with a fine breeze, which lasted till half past ten o'clock, and freshened again a little before noon.

Description of the entrance.

When you enter these straits, it is necessary to range the land of Button, of which the north point is of a middling height, and divided into several hummocks. The cape on the larboard side of the entrance is steep and bold-to. Several white rocks ly before it, pretty high above the water, and to the eastward is a fine bay, in which we saw a small vessel under sail. The opposite point of Wawoni is low, tolerably level, and projects to the westward. The land of Celebes then appears before you, and a passage opens to the north, between this great isle and Wawoni; this is a false passage: the southern one indeed appears almost entirely shut up; there you see at a great distance a low land, divided as it were into little isles or keys. As you advance in the straits, you discover upon the coast of Button, great round capes, and fine creeks. Off one of these capes are two rocks, which one must absolutely take at a distance for two ships under sail; the one pretty large, and the other a small one. About a league to the eastward of them, and a quarter of a league off the coast, we sounded in forty-five fathoms, sand and ooze. The straits from the entrance run successively S. W. and south.

At noon we observed in $4^0 29'$ south lat. and were then somewhat beyond the rocks. They ly off a little isle, behind which there appears to be a fine inlet. There we saw a kind of vessel in form of a square chest, having a periagua in tow. She made way both by sailing and rowing, and ranged the shore. A French sailor, whom we took in at Boero, and who for these four years past had sailed with the Dutch in the Moluccas, told us that it was a boat of piratical Indians, who endeavour to make prisoners in order to sell them. They seemed to be rather troubled at

meeting with us. They furled their sail, and set their vessel with setting poles close under the shore, behind the little isle.

Aspect of the country.

We continued our course in the straits, the winds turning round with the channel, and permitting us to come by degrees from S. W. to south. Towards two o'clock in the afternoon we thought the tide began to set against us; the sea then washed the lower parts of the trees upon the coast, which seems to prove that the flood-tide comes here from the northward, at least during this season. At half an hour after two o'clock we passed a very fine port upon the coast of Celebes. This land offers a charming prospect, on account of the variety of low lands, hills, and mountains. The landscape is adorned with a fine verdure, and every thing announces a rich country. Soon after, the isle of Pangesani, and the keys to the northward of it, appear separated, and we distinguished the several channels which they form. The high mountains of Celebes appeared above, and to the northward of these lands. The straits are afterwards formed by this long isle of Pangafani, and by that of Button. At half past five o'clock we were locked in so that we could not see either the entrance or the out-let, and we sounded in twenty-seven fathoms of water, and an excellent oozy bottom.

First anchorage.

The breeze which then came from E, S. E. obliged us to sail close upon it, in order to keep the coast of Button on board. At half past six o'clock, the wind coming more contrary, and the tide setting pretty strong against us, we let go a stream-anchor almost in the midst of the channel, in the same soundings which we had before, twenty-seven fathoms, soft ooze; which is a mark of an equal depth in all this part. The breadth of the straits from the entrance to this first anchorage, varies from seven to eight, nine and ten miles. The night was very fine. We supposed there were habitations on this part of Button, because we saw several fires there. Pangafani appeared much better peopled to us, if we judge by the great number of fires on every part of it. This isle is here low, level, and covered with fine trees, and I should not wonder if it contained spices.

Traffic with the inhabitants.

On the 13th, a great many periaguas, with outriggers, surrounded the ships. The Indians brought us fowls, eggs, bananas, perroquets and cockatoes. They desired to be paid in Dutch money, and especially in a plated coin, which is of the value of two French sous and a half. They likewise willingly took knives with red handles. These islanders came from a considerable plantation on the heights of Button, opposite our anchorage, occupying the skirts of five or six mountains. The land is there entirely cleared, intersected with ditches, and well planted. The habitations lay together in villages, or solitary in the midst of fields, surrounded by hedges. They cultivate rice, maize, potatoes, yam, and other roots. We have no where eaten better bananas than we got at this place. Here are likewise abundance of cocoa-nuts, citrons, mangle apples, and ananas or pineapples. All the people are very tawny, of a short stature, and ugly. Their language, the same as that of the Molucca isles, is the Malays, and their religion the Mahometan. They seem to have a great experience in their trade, but are gentle and honest. They offered us for sale some pieces of coloured but very coarse cotton. I shewed them some nutmegs and cloves, and asked them to give me some. They answered that they had some dried in their houses, and that whenever they wanted any, they went to get it upon Ceram, and in the neighbourhood of Banda, where the Dutch certainly are not the people to provide them with it. They told me that a great ship belonging to the company had passed through the straits about ten days ago.

From sun-rising the wind was weak and contrary, varying from south to S. W. I set sail at half past ten, with the first of the flood, and we made many boards without gaining much way. At half past four o'clock in the afternoon we entered a passage, which is only four miles broad. It is formed on the side of Button, by a low, but much projecting point, and leaves to the northward a great bay, in which are three isles. On the side of Pangafani it is formed by seven or eight little isles or keys, covered with wood, and lying at most half a quarter of a league from the coast. In one of our boards we ranged these keys almost within pistol shot, sounding close to them with fifteen fathoms without finding bottom. In the channel our soundings were in thirty-five, thirty, and twenty-seven fathoms, oozy bottom. We passed without, that is, on the west side of the three isles, upon the coast of Button. They are of a considerable size, and inhabited.

Second anchorage.

The coast of Pangafani here rises like an amphitheatre, with a low land at bottom, which I believe is often overflowed. I conclude it from seeing the islanders always fix their habitations upon the sides of the mountains. Perhaps too, as they are almost always at war with their neighbours, they choose to leave an interval of wood between their huts and the enemies who should attempt the landing. It seems even that they are dreaded by the inhabitants of Button, who consider them as pirates, upon whom no reliance can be had. Both parties are likewise used to wear the *criss* or dagger constantly in their girdle. At eight o'clock in the evening, the wind dying away entirely, we let go our stream-anchor in thirty-six fathoms, bottom of soft ooze. The *Etoile* anchored to the northward, nearer the land. Thus we had passed the first narrow gut or gullet.

Third and fourth anchorage.

The 14th, at eight o'clock in the morning, we weighed and made all the sail possible, the breeze being faint, and we plied till noon; when, upon seeing a bank to the S, S. W. we anchored in twenty fathoms, sand and ooze, and I sent a boat to sound round the bank. In the morning several periaguas came alongside, one among them displaying Dutch colours at her poop. At her approach, all the others retired to make way for her. She had on board one of their *orenciaes* or chiefs. The company allow them their colours, and the right to carry them. At one o'clock in the afternoon we set sail again, with a view to gain some leagues farther; but this was impossible, the wind being too light and scant; we lost about half a league, and at half past three o'clock we let go our anchor again, in thirteen fathom bottom of sand, ooze, shells, and coral.

Nautical advice.

Mean while M. de la Corre, whom I had sent in the boat, to sound between the bank and the shore, returned and made the following report: Near the bank there is eight or nine fathom of water; and as you go nearer the coast of Button, which is high and steep, opposite a fine bay, you always deepen your water, till you find no bottom with eighty fathom of line, almost mid-channel between the bank and the land. Consequently, if one was becalmed in this part, there would be no anchoring, except near the bank. The bottom is, upon the whole, of a good quality hereabouts. Several other banks ly between this and the coast of Pangafani. We cannot therefore sufficiently recommend it, to keep as close as possible to the land of Button in all this strait.

The good anchorages are along this coast; it hides no danger; and, besides this, the winds most frequently blow from thence. From hence, almost to the out-let of the strait, it seems to be nothing but a chain of isles; but the reason of this is, its being intersected by many bays, which must form excellent ports.

Continuation and description of the straits.

The night was very fair and calm. The 15th, at five o'clock in the morning, we set sail with a breeze at E. S. E. and we steered so as to come close to the east of Button. At half past seven o'clock we doubled the bank, and the breeze dying away, I hoisted out the long-boat and barge, and made signal for the Etoile to do the same. The tide was favourable, and our boats towed us till three o'clock in the afternoon. We passed by two excellent bays, where I believe an anchorage might be found; but all along, and very near the high-shores, there is no bottom. At half after three o'clock the wind blew very fresh at E. S. E. and we made sail to find an anchorage near the narrow pass, by which one must go out of these straits. We did not yet discover any appearances of it. On the contrary, the farther we advanced, the less issue did we perceive. The lands of both shores, which over-lap here, appear as one continued coast, and do not so much as let one suspect any outlet.

At half past four o'clock we were opposite, and to the westward of a very open bay, and saw a boat of the country-people's, which seemed to advance into it, to the southward. I sent my barge after her, with orders to bring her to me, as I intended to get a pilot by this means. During this time our other boats were employed in sounding. Somewhat off shore, and almost opposite the north point of the bay, they found twenty-five fathom, sand and coral bottom; and after that they were out of soundings. I put about, then lay-to under top-sails, in order to give the boats time to sound. After passing by the entrance of the bay, you find bottom again, all along the land which joins to its southerly point. Our boats made signal of 45, 40, 35, 29, and 28 fathom, oozy bottom; and we worked to gain this anchorage with the help of our long-boats. At half past five, we let go one of our bower-anchors there, in thirty-five fathom of water, bottom of soft ooze. The Etoile anchored to the southward of us.

Fifth anchorage.

As we were just come to an anchor, my barge returned with the Malayo boat. He had not found it difficult to determine the latter to follow her; and we took an Indian, who asked four ducatoons (about thirteen shillings sterling) for conducting us; this bargain was soon concluded. The pilot came to ly on board, and his periagua went to wait for him on the other side of the passage. He told us, she was going thither through the bottom of a neighbouring bay, from whence there was but a short portage, or carrying-place, for the periagua. We were, upon the whole, enabled to do without the assistance of this pilot; for some moments before we anchored, the sun shining very favourably upon the entrance of the gut, was the occasion of our discovering the larboard point of the out-let, bearing S. S. W. 4° W. but one must guess which it is; for it laps over a double rock, which forms the starboard point. Some of our gentlemen employed the rest of the day in walking about on shore; they found no habitations near our anchorage. They likewise searched the woods, with which all this part is entirely covered, but found no interesting production in it. They only met with a little bag near the shore, containing some dried nutmegs.

The next morning we began to heave ahead at half past two o'clock in the morning, and it was four before we got under sail. We could hardly perceive any wind; however, being towed by our boats, we got to the entrance of the passage.

The water was then quite low on both shores; and as we had hitherto found that the flood-tide set from the northward, we expected the favourable return of it every instant; but we were much deceived in our hopes; for here the flood sets from the southward, at least during this season, and I know not which are the limits of the two powers. The wind had freshened considerably, and was right aft. In vain did we with its assistance endeavour to stem the tide for an hour and a

Sixth anchorage.

half; the Etoile, which first began to fall astern, anchored near the entrance of the passage, on the side of Button, in a kind of elbow, where the tide forms a sort of eddy, and is not very sensibly felt. With the help of the wind I still struggled near an hour without losing ground; but the wind having left me, I soon lost a good mile, and anchored at one o'clock in the afternoon, in thirty fathom, bottom of sand and coral. I kept all the sails set, and steering the ship, in order, to ease my anchor, which was only a light stream-anchor.

Leaving the straits of Button; description of the passage.

All this day our ships were surrounded with periaguas. They went to and fro as at a fair, being laden with refreshments, curiosities, and pieces of cotton. This commerce was carried on without hindering our manœuvres. At four o'clock in the afternoon, the wind having freshened, and it being almost high-water, we weighed our anchor, and with all our boats a-head of the frigate we entered the passage, and were followed by the Etoile, who was towed in the same manner by her boats. At half past five o'clock, the narrowed pass was happily cleared; and at half an hour after six we anchored without, in the bay called Bay of Bouton, under the Dutch settlement.

Let us now return to the description of the passage. When you come from the northward, it does not begin to open till you are within a mile of it. The first object: which strikes one, on the side of Button, is a detached rock, hollow below, representing exactly the figure of a tented galley, [1] half of whose cut water is carried away: the bushes which cover it seem to form the tent; at low water, this galley joins to the bay; at high water, it is a little isle. The land of Button, which is tolerably high in this part, is covered with houses, and the sea-shore full of enclosures, for catching fish in. The other shore of the passage is perpendicular; its point is distinguishable by two sections, which form as it were two stories in the rock. After passing the galley, the lands on both sides are quite deep, and in some parts even hang over the channel. One would think, that the god of the sea had opened a passage here for his swelled waters, by a stroke of his trident. However, the aspect of the coast is charming; that of Button is cultivated, rises like an amphitheatre, and every where full of habitations, unless in such places, which by their steepness exclude men from coming at them. The coast of Pangafani, which is scarce any thing but one solid rock, is however covered with trees; but there appear only two or three habitations on it.

About a mile and a half to the northward of the passage, nearer Button than Pangafani, we find 20, 18, 15, 12 and 10 fathom, oozy bottom; as we advance to the southward in the channel, the bottom changes; there is sand and coral at different depths, from thirty-five to twelve fathom, and after that you are out of soundings.

Advice on this navigation.

The passage is about half a league long; its breadth varies from about 150 to 400 toises, [2] as we judged from appearance. The channel goes winding, and on the side of Pangafani; for at about two-thirds of its length, there is a fishery, which must be considered as a mark to avoid this shore, and range that of Button.

1 *Galere tentée*: we suppose M. de Bougainville means a galley, with her awnings spread. F.

2 Of six feet French measure each,

In general it is necessary, as much as possible, to keep the middle of the gut. It is likewise fit, unless you have a brisk and favourable wind, to have your boats out ahead, in order to steer well in the sinuosities of the channel.

The current, upon the whole, is strong enough there to carry you past in a calm, and even when there is a light contrary wind; but it is not sufficient to overcome a brisk head-wind, and to permit your passing the channel, making short boards under top-sails. When you come out of the gullet, the land of Button, several isles to the S. W. of it, and the lands of Pangafani look as the entrance of a great gulph. The best anchorage there, is opposite the Dutch settlement, about a mile off shore. Our pilot from Button, had assisted us with his knowledge, as far as was possible for a man who knows the particular situation of these parts, but understands nothing of the manœuvres of our ships. He took the greatest care to inform us of all dangers, banks, and anchorages; only he always required, that we should steer right in for the place where we wanted to go, making no allowance for our manner of hugging the wind, in order to be to windward, and to secure our point. He likewise believed, that we drew eight or ten fathom of water. In the morning another Indian came on board he was an experienced old man, and we took him to be the father of our pilot. They stayed with us till the evening, and I sent them back in one of my boats. Their habitation is near the Dutch factory; They would absolutely eat none of our provisions, not even, bread; some bananas and betel were their only food. They were not so religious about drinking. Both the pilot and his father drank great quantities of brandy; being, doubtless, assured that Mahomed had only forbid them wine.

Great visit of the islanders.

The 17th, at five o'clock in the morning, we were under sail. The wind was on-end; at first faint, then pretty fresh, and we continued plying. At day-break we saw a whole swarm of periaguas come out from all parts; they soon surrounded the ships, and a commerce was established, with which all parties were pleased. The Indians, without doubt, disposed of their provisions to us, to much greater advantage than they could have done to the Dutch; however they sold them at a low rate, and all our sailors could get poultry, eggs, and fruit. Both ships were full of fowls, up as high as the tops. I must here advise those that pass this way, to provide themselves, if they can, with the coin which the Dutch make use of in the Moluccas; and especially with the plated pieces; the value of which is 2½sous. As the Indians did not know the coin which we had, they did not value the Spanish reals, nor our pieces of 12 and 24 sous and often refused to take them. These Indians likewise offered to sell some finer and handsomer cottons than we had hitherto seen, and a prodigious quantity of cockatoes and parroquets, of the finest plumage.

Towards nine o'clock in the morning, we were visited by five *orenciaies* of Button, They came in a boat, which looked like a European one, except its being managed with paddles instead of oars. They had a great Dutch flag at their poop. These *orenciaies* are well dressed; they have long breeches, jackets with metal buttons, and turbans; whereas the other Indians are naked. They have likewise the distinctive mark which the company gives them; and which is a cane with a silver head, and this mark  on it. The oldest amongst them had above this mark an M, in the following manner,  They came, as they said, to be obedient to the company, and when they heard that we were French, they were not disconcerted; and said, that they very willingly did homage to France. They accompanied their first compliments of welcoming us, with the gift of a roe-buck; I presented them in the king's name with some silk stuffs, which they divided into five lots; and I taught them how to distinguish the colours of our nation. I offered them some liquor; this was what they expected, and Mahomed permitted them to drink some to the health of the sovereign of Button, and to that of France; to the prosperity of the Dutch company, and to our happy voyage. They then offered me all the assistance they were able to give; and told me that within three years there had passed at different times, three

English ships, which they had furnished with water, wood, fowls, and fruit; that they were their friends, and that they conceived, we should be their friends also. That instant their glasses were filled, and they had already drank off several bumpers. They further informed me, that the king of Button resided in this district; and I saw plainly that they were used to the more civilized manners of the capital. They call him Sultan; [1] and have certainly received that name from the Arabians, together with their religion. The Sultan is despotic and powerful, if power can be said to consist in the number of subjects; for his isle is large and well peopled. The *orencaies*, after taking leave of us, made a visit on board the *Etoile*. There they likewise drank to the health of their new friends, who were obliged to hand them down into their periaguas,

Situation of the Dutch at Button.

I asked them when they were drinking, whether their isle produced spices? and they answered in the negative; and I readily believe they spoke the truth, considering the weak settlement which the Dutch have here. This station is composed of seven or eight bamboo huts, with a kind of pallisadoes, decorated by the pole of a tent. There a serjeant and three men reside for the company. This coast, upon the whole, offers a most pleasing prospect; it is every where cultivated and covered with huts. The plantations of cocoa-nut trees are very frequent on it. The land rises with a gentle slope, and every where offers cultivated and enclosed fields. The sea-shore is all full of fisheries. The coast, which is opposite Button, is no less pleasing, nor less peopled.

Our pilot likewise returned to see us in the morning, and brought me some cocoa-nuts, which were the best I had as yet tasted. He told me, that when the sun should be at its greatest height, the S. E. breeze would be very fresh, and I gave him a good draught of brandy for such good news. We actually saw all the periaguas retire towards eleven o'clock; they would not venture out to sea at the approach of the brisk wind, which did not fail to blow as the Indian had foretold. A fresh and pretty strong breeze at S. E. took us as we made a board upon an isle to the west of Button; it permitted us to steer W. S. W. and made us gain a good way against the tide.

Nautical advice.

I must here observe, that one must take heed of a bank, which runs pretty far out to sea from the isle of which I have just spoken. As we plied in the morning, we sounded several times without finding bottom, with fifty fathoms of line.

At noon we observed in $5^{\circ} 31' 30''$ south lat. and this observation, together with that which we had made at the entrance of the strait, served to determine its length with precision. At three o'clock we perceived the southern extremity of Pangafani. We had ever since this morning seen the high mountains of the isle of Cambona, on which there is a peak, whose summit rises up above the clouds. About half an hour after four we discovered a part of the land of Celebes, We hoisted in our boats at sun-setting, and set all sails, steering W. S. W. till ten o'clock in the evening, when we stood W. by S. and we continued this course all night, with studding-sails set alow and aloft.

1 The word Sultan is not of Arabic, but of Tartarian origin; but early introduced into the Arabian language by the Turks that were in the service of the Caliphs. F.

Remarks on this navigation.

My intention was to fall in with the isle of Saleyer, about three or four leagues from its northern point, that is, in $5^{\circ} 55'$ or 6° of latitude, in order afterwards to go in search of the strait of the same name, between this isle and that of Celebes, along which you sail without seeing it, as its coast almost from Pangafani forms a gulph of immense depth.

Advantages of the preceding track.

It is likewise necessary to return in search of the strait of Saleyer, when you pass through the Toukan-bessie; and from the above details it must certainly be concluded, that the course through the strait of Button is in every respect preferable. It is one of the safest and most agreeable navigations that can be made. It joins all the advantages of the best harbour to excellent anchorage, and to the pleasure of making way at one's ease. We had now as great an abundance of fresh provisions on board our ships as there had been want before. The scurvy disappeared visibly; a great many fluxes were indeed complained of, occasioned by the change of food; this inconvenience, which is dangerous in the hot countries, where it commonly is converted into a bloody-flux, still more frequently becomes a severe sickness in the Moluccas. Both on shore and at sea it is deadly there to sleep in the open air, especially when the dew falls.

Passing the strait of Saleyer.

The 18th in the morning we did not see land, and I believe, that, during night, we lost three leagues by the currents; we still continued our course to W. by S. At half past nine o'clock we had a fair view of the high lands of Saleyer, bearing from W. S. W. to W. by N. and as we advanced, we discovered a less elevated point, which seems to terminate this isle to the northward. I then steered from W. by N. successively to N. W. by N. in order to view the straits well. This passage, which is formed by the lands of Celebes and those of Saleyer, is likewise made more narrow by three isles which seem to shut it up. The Dutch call them Bougerones; and the passage, the Bout-saron. They have a settlement upon Saleyer, commanded at present by Jan Hendrik Voll, book-keeper.

Description of this passage.

At noon we observed in $5^{\circ} 55'$ south lat. At first, we thought we saw an island to the northward of the middle land, which we had taken for the point of Saleyer; but this is a pretty high land, terminated by a point which is connected with Saleyer, by an exceeding low neck of land. Afterwards we discovered at once two pretty long isles, of a middle height, about four or five leagues asunder. And lastly, between those two we perceived a third, which is very little and very low.

The good passage is near this little isle, either to the northward or southward of it. I determined upon the latter, which appeared to me to be the largest. In order to facilitate the description, we shall call the little isle, *Isle of the Passage*; and the two others, the one *South Island* and the other *North Island*.

When we had sufficiently viewed them, I lay-to at the beginning of night, to wait for the Etoile. She did not come up with us till eight o'clock in the evening, and we entered the passage, keeping in the middle of the channel, which is about six or seven miles broad. At half past nine o'clock we bore north and south with the Isle of the Passage, and the middle of South Island bore from south to S. by E. I then steered W. by S. at one o'clock in the morning, then lay-to with the larboard-tack till four o'clock in the morning. Before, and in the passage, we sounded

several times with the hand-lead, finding no bottom with twenty and twenty-five fathoms of line. On the 19th at day-break we came near, and ranged the coast of Celebes at the distance of

Description of this part of Celebes.

three or four miles. It is really difficult to see a finer country in the world. In the back-ground there appear high mountains, at the foot of which extends an immense plain, every where cultivated, and covered with houses. The sea-shore forms a continued plantation of cocoa-nut trees, and the eye of a sailor, who has but just left off salt provisions, sees with rapture great herds of cattle grazing in these agreeable plains, embellished with groves at various distances. The population seems to be considerable in this part. At half an hour after noon we were opposite a great village, of which, the habitations, situated amidst the cocoa-nut trees, for a considerable space, followed the direction of the coast, along which you find eighteen and twenty fathoms of water, bottom of grey sand; but this depth decreases as you approach the shore.

This southern part of Celebes is terminated by three long points, which are level and low, and between which there are two pretty deep bays. Towards two o'clock we chased a Malayo boat, hoping to find somebody in it who might have practical knowledge of these shores. The boat immediately fled towards the shore, and when we joined her within reach of musket-shot, she was between the land and us, and we were in no more than seven fathoms of water. I fired three or four guns at her, which she did not attend to. She certainly took us for a Dutch ship, and was afraid of slavery. Almost all the people of this coast are pirates, and the Dutch make slaves of them whenever they take any. Being obliged to abandon the pursuit of this boat, I ordered the Etoile's canoe to sound a-head of us.

Difficulty of the navigation in this part.

We were at this time almost opposite the third point of Celebes, named Tanakeka, after which, the coast tends to N. N. W. Almost to the N. W. of this point are four isles, of which the most considerable named Tanakeka, like the S. W. point of Celebes, is low, level, and about three leagues long. The three others, more northerly than these, are very small. It was not necessary to double the dangerous shoal of *Brill* or the Spectacles, which I take to be north and south of Tanakeka, at the distance of four or five leagues to the utmost. Two passages lay before us, one between point Tanakeka and the isles, (and it is pretended that this is followed by the Dutch) the other between the isle of Tanakeka and the Spectacles; I preferred the latter, through which the course is more simple, and which I took to be the widest.

I ordered the Etoile's boat to direct her course in such a manner as to pass within a league and a half of the isle of Tanakeka, and I followed her under top-sails, the Etoile keeping in our wake. We passed over eight, nine, ten, eleven and twelve fathoms of water, steering from W. N. W. to W. by N. and then west when we came into thirteen, fourteen, fifteen, and sixteen fathoms, the northermost isle bearing N. N. E. I then recalled the Etoile's boat, and stood S. W. by S. sounding every half hour, and always finding fifteen or sixteen fathoms, bottom of coarse grey sand and gravel. At ten o'clock in the evening, the depth increased; at half past ten o'clock we sounded in seventy fathoms, sand and coral; then we found none with 120 fathoms of line. At midnight I made signal for the Etoile to hoist in her boat, and carry as much sail as she could, and I steered S. W. in order to pass mid-channel, between the Spectacles and a bank called Saras, sounding every hour without finding bottom. Whenever the wind is not brisk or favourable for doubling the Spectacles, it is necessary to anchor on the coast of Celebes, in one of the bays, and to wait for settled weather there; otherwise you run the risk of being thrown upon this dangerous shoal by the currents, without your being able to prevent it.

Continuation of the direction of our course.

The next day we saw no land; at ten o'clock we stood to W. S. W. and at noon had an observation in $6^{\circ} 10'$ south latitude. Then reckoning that we had doubled the bank of Saras, at least being sure by observation, of being to the southward of it, I steered west, and after making five or six leagues by this course, I stood W. by N. sounding every hour without finding bottom. Thus we kept in the channel between the Sestenbank and the Hen (*Poule*), to the northward; and the Pater-noster and Tangayang to the southward, carrying all sails set, both night and day, in order to get time to sound, by gaining upon the Etoile. I was told, that the currents here set towards the isles and bank of Tangayang. By the observation at noon, which was in $5^{\circ} 44'$ we had, on the contrary, at least nine minutes of difference north. The best advice I can give, is to keep such a course as to be out of soundings; you are then sure of being in the channel; if you approach too near the southern isles, you would begin to find only thirty fathom of water.

We made sail all the day of the 21st, in order to view the isles of Alambaï. The French charts mark three of them together, and a much larger one to the S. E. of them, seven leagues distant. This last does not exist where they place it; and the isles of Alambaï are all the four isles together. I reckoned myself in their latitude at sun-set, and steered W. by S. till we had run the length of them. During day-time we had dispensed with sounding. At eight o'clock in the evening we had forty fathom of water, bottom of sand and ooze. We then stood S. W. by W. and W. S. W. till six in the morning; then reckoning that we had passed the isles of Alambaï, we stood W. by S. till noon. During night we always found forty fathom, bottom of soft ooze, till four o'clock, when we found only thirty-eight. At mid-night we saw a boat coming towards us; as soon as she perceived us, she hauled her wind, and would not bear down to us, though we twice fired a gun. These people are more afraid of the Dutch, than of the firing of guns. Another boat, which we saw in the morning, was not more curious to come near us. At noon we observed in $6^{\circ} 8'$ of latitude, and this observation further gave us a distance of 8' north of our reckoning.

General remarks on this navigation.

We were now past all the dangers which are so much dreaded in the navigation from the Moluccas to Batavia. The Dutch take the greatest precautions to keep those charts secret by which they sail in these parts. It is probable that they magnify the dangers; at least I have seen very few in the straits of Button, Saleyer, and in the last passage we had now left, though all these three parts had been described to us at Boero, as perilous beyond measure. I own that this navigation would be much more difficult from east to west. The points of landfall to the eastward are not fine, and can easily be missed, whereas those to the west are fine and safe. However, in both courses, it is essential to have good observations of latitude every day. The want of this help might lead one into dangerous mistakes. We could not, in these last days, compute whether the currents set us eastward or westward, as we had had no bearings.

Inexactness of the known charts of this part.

I must here mention, that all the French charts of these parts cannot be depended upon. They are inaccurate, not only in regard to the position of the coasts and isles, but even in the essential latitudes. The straits of Button and Saleyer are extremely faulty; our charts even have omitted the three isles which make this last passage narrower, and those which lie to the N. N. W. of the isle of Tanakeka. M. d'Après, at least mentions, that he does not answer for the exactness of his chart of the Moluccas and Philipinas, because he had not been able to obtain satisfactory

memoirs concerning that part. For the safety of navigators, I wish that all those, who compile charts, would display the same candour. The map which gave me the greatest assistance, is that of Asia, by M. d'Anville, published in 1752. It is very good from Ceram to the isles of Alambai. On the whole course I have verified, by my observations, the exactness of his positions, and of the bearings which he gives to the most interesting parts of this difficult navigation. I shall add, that New Guinea and the isles of Papua come nearer the truth in this map, than in any other which I had in my hands. I do this justice to M. d'Anville's work with pleasure. I have known him particularly; and he seemed to me to be as good a citizen as he was a good critic, and a man of great erudition.

From the 22nd in the morning, we continued our course W. by S. till the 23^d, at eight o'clock in the morning, when we steered W. S. W. We found 47, 45, 42, and 41 fathom; and the bottom, I shall say it once for all, is here, and upon the whole coast of Java, an excellent bottom of soft ooze. We still found seven minutes difference north by the altitude at noon, which we observed in $6^{\circ} 24'$. The Etoile had made signal of seeing the land by six o'clock in the morning; but the weather becoming squally, we did not then perceive it. After noon I shaped our course more to the southward, and at two o'clock we discovered at mast-head the north coast of the isle of Maduré. At six o'clock we see it, bearing from S. E. by S. to W. $\frac{1}{4}$ S. The horizon was too thick to enable us to compute at what distance it was. The soundings in the afternoon constantly gave forty fathom. We saw a great many fishing-boats, some of which were at anchor, and had thrown out their nets.

Sight of the isle of Java.

The winds, during night, varied from S.E. to S.W. We ran close-hauled, with the larboard tacks on board; and from ten o'clock in the evening had soundings in 28, 25, and 20 fathom. At nine o'clock in the morning, when we had approached the land, we found 17 fathom, and at noon only ten. The great lands of point Alang upon Java, then bore S. E. by S, of us, about two leagues; the isle of Mandali S. W. 9° W. two miles; and the most westerly lands, W. S. W, four leagues. Having these bearings, we observed in $6^{\circ} 22' 30''$, which was pretty conformable to our estimated latitude, pricking off our point at noon upon the chart of M, d' Après, according to the bearings I found.

Geographical observations.

1d, That the coast of Java is there placed nine or twelve minutes more to the southward than it ought to be, by the mean result of our meridian observation.

2d, That the position of point Alang is not exact in it, as he makes it run W. S. W. and S. W. by W. whereas it really runs from the isle of Mandali W. by S. for about 15 miles; after which it turns to the southward, and forms a great gulph.

3d, That he gives too little extent to this part of the coast; and that if we had followed the bearings on his chart, we must, from noon to noon, have made thirteen miles less to the westward; either because the coast had really so much more extent, or because the currents set us to the eastward.

Meeting some Dutch ships.

Besides a great number of fishing-boats, we saw in the morning four ships, of which two stood the same course as ourselves, and displayed Dutch colours. Towards three o'clock we joined one of them, and spoke with her; she was a snow from Malacca, bound for Japara. Her consort,

a three-masted ship, likewise coming from Malacca, was bound for Saramang. They soon came to an anchor upon the coast. We ranged it, at the distance of about three quarters of a league, till four o'clock in the evening. We then steered W. by N. in order not to get deeper into this gulph, and to pass on the off side of a coral-bank, which is about five or six leagues off shore. As far as this part, the coast of Java is not much elevated near the sea-shore, but in the interior parts we perceived high mountains. At half past five o'clock, the middle of the isles of Carimon-Java bore N. 2° W. about eight leagues.

Course along Java.

We stood W. by N. till four o'clock in the morning, then west till noon. The day before we had sounded in nine and ten fathom near the shore; we deepened our water by seven o'clock in the evening; when we found 30, and in the night 32, 34, and 35 fathom. At sun-rise we saw no lands, only some ships; and, as usual, an infinite number of fishing-boats. Unluckily it was a calm almost the whole 25th, till five o'clock in the evening. I say unluckily, by so much the more, as it was necessary we should have sight of the land before night, in order to direct our course in consequence thereof, between Point Indermay, and the Isles of Rachit, and afterwards to keep towards the offing of some rocks under water, which are to the westward of them. From noon, when we had observed in $6^{\circ} 26'$ of latitude, we steered W. and W. by S. but the sun set before we could see the land. Some of our people thought, but without any certainty, that they perceived the blue mountains, which are forty leagues off Batavia. From six o'clock in the evening to midnight, we steered W. and W. by N, sounding every hour in twenty-five, twenty-four, twenty-one, twenty, and nineteen fathoms. At one o'clock in the morning we ran W. by N. from two o'clock to four, N. W. then N. W. by W. till six o'clock. My intention, expecting to be in the middle of the channel between the isles of Rachit and the land of Java at one o'clock in the morning, was to get to the northward of the rocks. We sounded thrice in twenty fathoms, than twenty-two, next twenty-three; and I then reckoned myself three or four leagues to the N. N. W. of the isles of Rachit.

Error in the reckoning of our course.

I was very much out in my reckoning. On the 26th, the rays of the rising sun shewed us the coast of Java, bearing from S. by W. to west, some degrees north, and at half past seven o'clock we saw from mast-head the isles of Rachit, about seven leagues distant, bearing N. N. W. and N. W. by N. These bearings gave me a prodigious and dangerous difference with the chart of M. d'Après. But I suspended my judgment till the observation at noon should determine whether this difference was to be attributed to the currents, or whether the chart ought to be charged with it. I fleered W. by N. and W. N. W. in order to view the coast well, it being in this part extremely low, and without any mountains in the interior parts. The wind was at S.S.E. S.E. and E. pretty fresh.

Causes of this error.

At noon the southermost point of Indermay bore E. by S. 2° S. about four leagues distant; the middle of the isles of Rachit, N. E. five leagues distant, and the mean result of the altitude observed on board, placed us in $6^{\circ} 12'$ of latitude. By this observation, and the bearings, it seemed to me that the gulph between the isle of Mandali and point Indermay, is in the chart laid down less broad from E. to W. by twenty-two minutes than it really is, and that the coast: is therein laid down $16'$ more southerly than our observations place it. The same correction must take place in regard to the isles of Rachit, by adding, that the distance between these isles and

the coast of Java, is at least two leagues greater than that which is expressed in the chart. In regard to the bearings of the several parts of the coast from each other, they appeared to me to be exact enough, as much as we could judge of it by our successive estimations made by sight, and as we ran along. Upon the whole, the differences above-mentioned are very dangerous for one who sails in this part in night-time.

All this morning we had found twenty-one, twenty-three, nineteen, and eighteen fathoms. The E. S. E. breeze continued, and we ranged the coast at three or four miles distance, in order to pass to the southward of the hidden rocks, of which I have already spoken, and which are laid down five or six leagues to the westward of the isles of Rachit. At one o'clock in the afternoon, a boat which lay at anchor a-head of us, made sail upon the starboard-tack, which made me think that the current then changed, and became contrary to us. We spoke with her at two o'clock; a Dutchman who commanded her, and who seemed to be the only white man on board, having some mulattoes with him, said, he was bound for Amboina and Ternate; and that he came from Batavia, from whence he was twenty-six leagues by his reckoning. After coming out of the passage of Rachit, and passing within the rocks which are under water, I wanted to stand N. W. in order to double two sand-banks, named Perilous Banks, which run pretty far out to sea, between the points Indermay and Sidari. The wind would not admit of it, and as I could only stand W. N. W. I let go a stream anchor, at seven o'clock in the evening, in thirteen fathoms, oozy bottom, about a league off shore. We could only ply with very short and unsafe tacks between the rocks under water on one side, and the perilous banks on the other. We had sounded since noon in nineteen, fifteen, fourteen, and ten fathoms. Before we anchored, we made a short board to the offing, which brought us into thirteen fathoms.

We weighed on the 27th, at two o'clock in the morning, with the land-breeze, which this night came from the west, whereas on the preceding nights they had veered all round from north to south by the east. Having steered N. W. we did not see the land again till eight o'clock in the morning, it being then very low, and almost overflowed; we kept the same course till noon, and from our setting sail to that hour, our soundings varied from thirteen to sixteen, twenty, twenty-two, twenty-three, and twenty-four fathoms. At half past ten o'clock we found a coral bottom; I sounded again the moment after, and the bottom was oozy as usual.

At noon we observed $5^{\circ} 48'$ of latitude; we could not see the land from the deck, as it is so very low.

We set it from mast-head, bearing from south to S. W. by W. at the computed distance of five or six leagues. This day's observation, compared with the bearings, did not differ above two or three minutes, which this part of Java is placed too much south in the chart of M. d'Après; but this difference is equal to nothing, because, to make it real, we must suppose the computation of the distances of the bearings perfectly exact. The currents had still set us to the northward, and I believe likewise to the westward.

New error in our reckoning.

The weather was very fine all day, and the wind favourable; in the afternoon I shaped our course a little more to the northward, in order to avoid the shallows of the point of Sidari. At midnight, thinking to have past them, we stood W. by S. and W. S. W. then S. W. seeing that the water, which was nineteen fathoms at one o'clock, was successively increased to twenty-seven fathoms. At three o'clock in the morning we perceived an isle, bearing N. W. $\frac{1}{4}$ N. about three leagues. Being then convinced that I was more advanced than I at first thought, and even being afraid of passing by Batavia, I came to an anchor, in order to wait for day-light. At sun-rise we discerned all the isles of the bay of Batavia; the isle of Edam, on which there is a flag, bore S. E. by S. about four leagues, and the isle of Onrust, or of Careening, S. by W. $\frac{1}{4}$ W. near five leagues: thus we were ten leagues more to the westward than we had thought; a

difference which may have been occasioned both by the currents, and by the inaccuracy with which the coast is laid down in the chart,

At half past ten o'clock in the morning I attempted to set sail, but the wind dying away immediately, and the tide being contrary, I let go a stream-anchor under sail. We weighed again at half an hour after noon, standing in for the middle of the isle of Edam, till we were within three quarters of a league of it. The cupola of the great church at Batavia then bearing south, we steered for it, passing between the beacons which indicate the channel. At six o'clock we anchored in the road in six fathoms, oozy bottom, without mooring, as it is usual here to be content only with having another anchor ready to let go. An hour after, the Etoile anchored to the E. N. E. at two cable's lengths from us.

Anchorage at Batavia.

Thus, after keeping the sea for ten months and a half, we arrived on the 28th of September, 1768, at one of the finest colonies in the universe, where we all looked upon each other as having completed our voyage.

Batavia, by my reckoning is in $6^{\circ} 11'$ south latitude, and $104^{\circ} 52'$ east longitude, from the meridian of Paris.

CHAP. VIII.

Stay at Batavia, and particulars concerning the Moluccas.

THE unhealthy season, which here generally begins at the end of the monsoon, and the approach of the rainy western monsoon, determined us to make our stay at Batavia as short as possible. However, notwithstanding our impatient desire of leaving it, our wants forced us to pass a certain number of days there, and the necessity of getting some biscuit baked, which we did not find ready, detained us longer than we had imagined. On our arrival, there were thirteen or fourteen of the Dutch company's ships in the road, one of which was a flag ship. This is an old ship which is left at this station; it has the jurisdiction of the road, and returns the salute of

Ceremonies at our arrival.

all the merchant ships. I had already sent an officer to inform the governor-general of our arrival, when a barge from this flag ship came on board, with a paper written in Dutch, which I knew nothing of. There was no officer in the barge, and the cockswain, who doubtless acted in his stead, asked me who we were, and required a certificate, written and signed by me. I answered him, that I had sent my declaration on shore, and so I put him off. He returned soon after, insisting upon his first demand; I sent him away once more with the same answer, and he put up with it. The officer who had been sent to the general, did not return till nine o'clock in the evening. He had not seen his excellency, who was in the country, and he was brought before the *Sabandar*, or introducer of strangers, who appointed him to return the next morning, and told him, that if I would come on shore, he would conduct me to the general.

Visits to the general in the country.

Visits are made very early in this country, on account of the excessive heat. We set out at six o'clock in the morning, conducted by the sabandar M. Vanderluys, and we went to M. Vander Para, general of the East-Indies, who was at one of his country-houses, about three leagues from Batavia. We found him a plain, but civil man, who received us perfectly well, and offered us all the assistance we could be in need of. He appeared neither surprised nor displeased at our having touched at the Moluccas; he even approved of the conduct of the chief resident at Boero, and of his good proceedings in our behalf. He consented to have our sick put into the hospital of the company, and immediately sent orders thither for their reception. As to the supplies which the king's ships were in want of, it was agreed, that we should give in an account of our demands to the sabandar, who should be charged with providing us with every thing. One of the perquisites of his place was to gain something by us, and some-thing by the undertakers. When all was settled, the general asked me, whether I would not salute the flag; I answered I would, on condition that the salute was returned gun for gun from the place. Nothing, says he, is more equitable, and the citadel has got the proper orders. As soon as I was returned on board, I saluted with fifteen guns, and the town answered with the same number. I immediately sent our sick to the hospital, from both ships, being in number twenty-eight, some still afflicted with the scurvy, but the greater part ill of a bloody-flux. We likewise prepared to give in to the sabandar an account of our wants, in biscuit, wine, flour, fresh meat, and pulse; and I begged him to let us have our provision of water by the company's people. We at the same time thought of getting a lodging in town, during our stay: this we got in a great and fine house, here called the *inner logement*, where you are lodged and boarded for two rix

dollars a day, servants not included, which amounts to about a pistole of our money, This house belongs to the company, who let it to a private person, and by that means give him the exclusive privilege of lodging all strangers. However, men of war are not subject to this law, and therefore the officers of the Etoile went to lodge in a private family. We likewise hired several carriages, which one cannot absolutely do without in this great town, especially as we intended to visit its environs, which are infinitely more beautiful than the town itself. These hired carriages have room for two persons, are drawn by horses, and their price every day is somewhat more than ten francs (between eight and nine shillings sterling).

On the third day of our arrival, we went in a body to pay a visit of ceremony to the general, the sabandar having previously given him notice of it. He received us in another country-seat, named Jacatra, of which the distance from Batavia is only about a third of that of the house where I had been on the first day. The road which leads to it cannot be better compared than to the place called Boulevards, at Paris, supposing them to be embellished with a canal of running water on the right and the left. We ought to have made several other visits of ceremony; likewise introduced by the sabandar, namely, to the director-general, the president of justice, and the chief of the marine. M. Vanderluys told us nothing of it, and we only visited the latter. His title is Scopenhagen. [1] Though this officer only ranks as rear-admiral in the company's service, the present is however vice-admiral of the states general, by a particular favour of the stadt-holder. This prince was willing thus to distinguish a man of quality, who, on account of his broken fortune, has been obliged to leave the service of the states, whom he has well served, and to take the place which he now occupies.

The *Schout-by-Nacht* is a member of the high regency, in whose assembly he has a seat, and a vote in their debates for the marine affairs; he likewise enjoys all the honours which are due to the Edel-heers. He keeps a great retinue, lives very high, and makes himself amends for the bad moments he has often passed at sea, by spending his time in a delicious villa.

Amusements which are to be found at Batavia.

The principal inhabitants of Batavia endeavoured to make our stay agreeable to us. Great feasts in the town and country, concerts, charming walks, the variety of objects united here, and most of them new to us, the sight of the emporium of the richest commerce in the world; and, more than this, the appearance of several people who, though of entirely opposite manners, customs, and religion, however form one society; every thing in fine concurred to charm the eye, instruct the navigator, and interest even the philosopher. Here is likewise a pretty good play-house; we could judge only of the theatre itself, which seemed handsome to us; as we did not understand the language, we had seen enough of it by going there once. We were much more curious to see the Chinese comedies, though we did not understand any more what was said there; it would not be very agreeable to see them every day, but one ought to see one of each kind.

Independent of the great pieces which are represented on a theatre, there are every day small pieces and pantomimes, represented on scaffolds, built at every corner in the Chinese quarter. The Roman people called for bread and shows; the Chinese must have commerce and farces. God forbid I should ever again hear the declamations of their actors and actresses, which is always accompanied with some instruments. It is an overstrained recitative accompanied, and I know of nothing that can be more ridiculous, except their gestures. I must likewise observe, that I cannot properly speak of their actors, because the parts of men are always acted by women.

1 This name is wretchedly disfigured from the Dutch, *Schout-by-Nacht*, which signifies *Rear Admiral*. F.

I shall add too, and allow the reader to make what inferences he pleases, that I have seen blows as frequent on the Chinese stage, and gain as much applause there, as at the Italian comedy, or at Nicolet's.

Beauty of its environs.

We could never be tired with walking in the environs of Batavia. Every European, though he be used to live in the greatest capitals, must be struck with the magnificence of the country around it. This is adorned with houses and elegant gardens, which are kept in order, in that taste and with that neatness which is peculiarly observable in all the Dutch possessions. I can venture to assert that these environs surpass those of the greatest cities in France, and approach the magnificence of those of Paris. I ought not to omit mentioning a monument, which a private person has there erected to the Muses. Mr. Mohr, the first clergyman at Batavia, a man of immense riches, but more valuable on account of his knowledge and taste for the sciences, has built an observatory, in a garden belonging to one of his country-houses, which would be an ornament to any royal palace. This building, which is scarce completed, has cost prodigious sums. Its owner now does something still better, he makes observations in it. He has got the best instruments of all kinds from Europe, necessary for the nicest observations, and he is capable of making use of them. This astronomer, who is doubtless the richest of all the children of Urania, was charmed to see M. Verron. He desired he should pass the nights in his observatory; unluckily, not a single one has been favourable to their purposes. M. Mohr has observed the last transit of Venus, and has communicated his observations to the academy of Harlem; they will serve to determine the longitude of Batavia with precision.

Though this city is really very fine, it is however far from answering what one may expect, after seeing its environs. We see few great buildings in it; but it is well laid out: the houses are convenient and pleasant; the streets large, and adorned with a well embanked canal, and bordered with trees; the first to promote cleanliness, and the latter to procure conveniency by their shade. It is true, these canals keep up an unwholsome humidity, which renders the stay at Batavia pernicious to Europeans. The insalubrity of this climate is likewise in part attributed to the bad quality of the water therefore the rich people at Batavia drink nothing but Seltzer water, which they get from Holland at a vast expence. The streets are not paved; but on each side there is abroad and fine foot-pavement of free-stone, or of bricks; and Dutch cleanliness constantly keeps it in the best repair. I do not pretend to give an exact and particular description of Batavia; that subject has often been exhausted. One may form an idea of that famous place, by knowing that it is built in the taste of the finest towns in Holland, with this difference, that on account of the frequent earthquakes, the people cannot raise their houses very high, and consequently they have only one story, I shall likewise not describe the Chinese camp, which is out of town, nor the police it is subject to, nor their customs, nor a number of other things, which have already been repeatedly said by others.

Riches and luxury of the inhabitants.

The luxury which prevails at Batavia is very striking; the magnificence and taste, with which the interior parts of the houses are decorated, are proofs of the riches of their inhabitants. We have however been told, that Batavia was not near so great as it had been. For some years past, the company have forbid private persons to carry on the commerce between the two Indies, which was to them the source of an immense circulation of riches. I do not censure this new regulation of the company, as I do not know what advantages they may have in view in this prohibition. I only know, that the persons in their service still know the secret of making thirty, forty, an hundred, and up to two hundred thousand livres, of yearly revenues, of their places, to

which the salaries of fifteen hundred, three thousand, and at most, six thousand livres are annexed. But almost all the inhabitants of Batavia are employed by the company. However it is certain, that the price of houses, both in the town and country, is more than two thirds below their ancient value; yet Batavia will always remain more or less, rich; both by means of the secret I have just spoken of, and because those who make a fortune here, find it difficult to bring it over to Europe. There are no other means of conveying it to Holland than through the hands of the company, who take charge of it at the rate of eight per cent, discount; but they take but a very little at a from each person. Besides this, it is impossible to send over such cash by stealth; the specie, which is current here, losing twenty-eight per cent, in Europe. The company employs the emperor of Java to strike a particular coin, which is the currency throughout India.

Particulars concerning the administration of the company.

In no place in the world the different classes of people are less confounded together, than at Batavia; every one has his rank assigned to him; this is fixed unalterably by some exterior marks; and the stiff *etiquette* is more rigidly observed here than it ever was at any congress. The ranks of the different states are the high regency, the court of justice, the clergy, the servants of the company, the officers of the marine, and, lest of all, the military.

The high regency consists of the general; who presides there; of the counsellors of the Indies, whose title is *Edele-heeren*, of the president of the court of justice, and of the Schout-by-Nacht. They meet at the castle twice a week. The counsellors of the Indies are now-sixteen in number; but they are not all at Batavia. Some of them have the important governments of the Cape of Good Hope, of Ceylon, of the coast of Coromandel, of the eastern part of Java, of Macassar, and of Amboina, and they reside there. These *Edele-heeren* have the prerogative of gilding their carriages all over, and having two running-footmen before them; whereas every private person can only keep one. It is further settled, that all coaches must stop, when those of the *Edele-heeren* pass by; and the people within, either men or women, are obliged to rise up. The general, besides this distinction, is alone permitted to go with six horses; he is always followed by a guard on horseback, or at lead by the officers of that guard, and some of the private men; when he passes by, both men and women must step out of their carriages; and the coaches of none but those of the *Edel-heeren* can drive to the flight of steps before his door. I have seen some of them, who had good sense enough to laugh with us in private at all these pompous prerogatives.

The court of Justice decides without appeal in all civil and criminal causes. About twenty years ago, they condemned a governor of Ceylon to death. That *Edele-heer* was convicted of exercising horrible oppressions in his government, and was executed at Batavia, on the place opposite the citadel. The appointment of the general of the Indies, of the *Edele-heeren*, and of the members of the court of Justice, is made out in Europe. The general, and the high regency of Batavia, propose persons for the other employments, and their choice must always be confirmed in Holland. However, the general has the right of giving away all the military preferments. One of the most considerable and best places, in point of emolument after the governments, is that of commissary of the country. This officer has the inspection over every thing, which forms the company's demesnes upon the Isle of Java, even over the possessions and conduct of the several sovereigns of the island; he has likewise an absolute jurisdiction over those Javanese, who are the company's subjects. The regulations of the police concerning them are very severe, and every considerable offence is rigorously punished. The constancy of the Javanese, in suffering the most barbarous torments, is incredible; but when they are executed, they must have white drawers on, and never be beheaded. If the company should refuse to have this complaisance for them, their authority would be in danger, and the Javanese would revolt. The reason of this is obvious: as, according to their tenets, they believe that they

would meet in the other world with a bad reception, if they should arrive there without their heads, and without white drawers; they likewise dare to-believe, that despotism has a power over them only in this world.

Another employment, which is much sought after, of which the functions are agreeable, and the revenues considerable, is that of Sabandar, or minister for foreigners. There are two of them, the sabander of the Christians, and that of the Pagans. The former is charged with every thing that regards the European foreigners. The latter is vested with the affairs relative to all the

Order of the places in the service of the company.

divers nations of India, comprising the Chinese. These last are the brokers of all the interior commerce of Batavia, where their numbers at present exceeds a hundred thousand. The abundance which has reigned for some years past in the markets of this great city, is likewise owing to their labour and care. In general, the order of employments in the company's Service is as follows: assistant, book-keeper, under-merchant, merchant, great-merchant, governor. All these civil degrees have a uniform, and the military ranks have a kind of correspondence with them. Thus for example; the major ranks as great-merchant, the captain as under-merchant, &c, but the military can never come to any places in the administration, without changing their condition. It is very natural, that in a trading company, the military body should have no influence at all; they are there looked upon merely as a body who are kept in pay; and this idea is here so much the more applicable, as it consists entirely of strangers.

Demesnes of the company upon the isle of Java.

The company possesses, in their own right, a considerable part of the isle of Java. All the north coast, to the eastward of Batavia, belongs to them. They have added, several years ago, to their possessions, the isle of Maduré, of which the Sovereign had revolted; and the son is at present the governor of that isle, where his father had been king. The company have likewise profited of the revolt of the king of Balimbuan, in order to appropriate to themselves that fine province, which forms the eastermost point of Java. That prince, who was the brother of the emperor, ashamed of being subject to merchants, and by the advice, as it is said, of the English, (who furnished him with arms and gunpowder, and even built him a fort) attempted to-throw off the yoke. The company spent two years, and great sums, in conquering him, and had concluded the war but two months before we came to Batavia. The Dutch had been worsted in the first battle; but in the Second, the Indian prince had been taken with all his family, and conducted to the citadel of Batavia, where he died a few days after. His son, and the other persons of that unhappy family, were to be put aboard the first vessels, and brought to the Cape of Good Hope, where they will end their days upon the Isle of Roben.

Number of principalities into which the isle of Java is divided.

The remaining part of the isle of Java is divided into several kingdoms. The emperor of Java, whose residence lies in the southern part of the island, has the first rank; next to him is the Sultan of Mataran, and the king of Bantam. Tseribon is governed by three kings, vassals of the company, whose consent is likewise necessary to all the other sovereigns on the isle, for mounting their tottering thrones. They place a European guard round every one of these kings, and oblige them to answer for their persons. The company have likewise four fortified factories in the emperor's dominion; one in the sultan's, four in Bantam, and two in Tseribon. These sovereigns are obliged to furnish the company with provisions, at a certain rate fixed by the latter. The company receives rice, sugar, coffee, tin, and arrack from them; and again have the

exclusive right of furnishing them with opium, of which the Javanese consume great quantities, and the sale of which brings in considerable profits.

Commerce of Batavia.

Batavia is the emporium or staple of all the productions of the Moluccas. The whole crop of spices is carried thither: the ships are annually laden with as much as is necessary for the consumption in Europe, and what remains is burnt. This commerce alone forms the riches, and I may say assures the existence of the Dutch East India Company; it enables them to bear, not only the immense expences, which they must incur, but likewise the depredations of the people whom they employ, and which often come to as much as the expences themselves. They accordingly direct their principal cares to this exclusive commerce, and that of Ceylon. I shall say nothing of Ceylon, because I do not know that isle; the company have just put an end there to an expensive war, with more success than to another in the Persian gulph, where all their factories have been destroyed. But as we are almost the only ships of the king that penetrated into the Moluccas, I must beg leave to give some particulars concerning the present state of that important part of the world, which is kept from the knowledge of other nations by the silence of the Dutch, and its great distance.

Particulars concerning the Moluccas.

Formerly they only comprised under the name of: Moluccas, the little isles situated almost under the line between 15' S. lat. and 50' N. lat. along the western coast of Gilolo; of which the most considerable were Ternate, Tidor, Mothier or Mothir, Machian, and Bachian. By degrees that name became common to all the isles which produced spices. Banda, Amboina, Ceram, Boero, and all the adjacent isles are ranged under the same denomination, under which some have unsuccessfully attempted to bring Bouton and Celebes. The Dutch now divide these countries, which, they call the *Countries of the East*, into four principal governments, from which the other factories depend, and which again stand under the high regency of Batavia. These four governments are Amboina, Banda, Ternate, and Macassar.

Government of Amboina.

Amboina, of which an Edel-heer is governor, has six factories dependent upon it, viz. on Amboina itself, Hila, and Larique; of which the chiefs rank, the one as merchant, and the other as under-merchant;» to the westward of Amboina, the isles of Manipa and Boero, on the former of which is only a book-keeper, on the latter our benefactor Hendrick Ouman, under-merchant; Harocko, a little isle, nearly to the E. S. E. of Amboina, where an under-merchant resides; and, lastly, Saparoea, an isle likewise to the S. E. and about 15 leagues off Amboina. There resides a merchant, in whose dependency is the little isle of Neeslaw, whither he sends a serjeant and fifteen men: there is a little fort built upon a rock at Saparoea, and a good anchorage in a fine bay. This isle, and that of Neeslaw, could furnish a whole ship s lading of cloves. All the forces of the government of Amboina actually consist of no more than 150 men, under the command of a captain, a lieutenant, and five ensigns; they have likewise two artillery officers, and an engineer.

Government of Banda.

The government of Banda is more considerable, as to its fortifications, and its garrison is likewise more numerous; it consists of three hundred men, commanded by a captain,

captain-lieutenant, two lieutenants, four ensigns, and one artillery officer. This garrison, the same as that of Amboina, and of the other chief places, supplies all the detached stations. The entrance to Banda is very difficult to those who are unacquainted with it. It is necessary to range close along the mountain of Gunongapi, on which there is a fort, taking care to avoid a bank of rocks, which must be left on the larboard side. The pass is only a mile broad, and there are no soundings in it. You must then range along the bank, in order to get to the anchorage in eight or ten fathom under the fort London, where five or six ships can ly at anchor. Three stations depend upon the government of Banda: Ouriën, where a bookkeeper resides; Wayer, where an under-merchant is stationed; and the isle of Pulo Ry en Rhun, which is nearer Banda, and covered with nutmegs. A great-merchant commands upon this isle, where the Dutch have a fort; none but sloops can anchor in the harbour; and they must ly upon a bank which prevents their approaching the fort. It would even be necessary (in case of an attack) to canonade it under sail; for close to the bank there is no bottom to be found. There is no fresh-water upon the isle; the garrison is obliged to get it from Banda. I believe that the Isle of Arrow is likewise in the district of this government. There is a factory on it, with a serjeant and fifteen men, and the company get pearls from thence. Timor and Solor, though they are pretty near it, depend immediately upon Batavia. These isles furnish sandal-wood. It is singular enough, that the Portuguese should keep a station upon Timor; and still more singular, that they make but little advantage of it.

Government of Ternate.

Ternate has four principal factories in its dependency, viz. Gorontalo, Manado, Limbotto, and Xullabessie. The chiefs of the two first rank as under-merchants; the latter are only book-keepers; several little stations, commanded by serjeants, likewise depend upon it. Two hundred and fifty men are garrisoned in the government of Ternate, under the command of a captain, a lieutenant, nine ensigns, and one artillery officer.

Government of Macassar.

The government of Macassar, upon the isle of Celebes, which is occupied by an Edel-heer, has four factories in its department; Boelacomba en Bonthain, and Bima, where two under-merchants reside; Saleyer and Maros, of which the chiefs are only book-keepers. Macassar, or Jonpandam, is the strongest place in the Moluccas; however, the natives are careful to confine the Dutch there within the limits of their station. The garrison there consists of three hundred men, commanded by a captain, captain-lieutenant, two lieutenants, and seven ensigns; there is likewise an artillery officer.

There are no spices to be found within the district of this government, unless it is true that Button produces some, which I have not been able to ascertain. The intention in establishing it, was to make sure of a passage, which is one of the keys to the Moluccas, and to open an advantageous trade with Celebes and Borneo. These two great isles furnish the Dutch with gold, silk, cotton, precious sorts of wood, and even diamonds, in return for iron, cloths, and other European or Indian merchandizes.

Dutch politics in the Moluccas.

This account of the different stations which the Dutch occupy in the Moluccas, is pretty exact. The police which they have there established does honour to the understanding of those who were then at the head of the company. When they had driven the Spaniards and Portuguese from thence, by the most sensible combination of courage with patience, they well guessed that

the expulsion of the Europeans from the Moluccas would not secure them the exclusive spice-trade. The great number of these isles made it almost impossible for them to guard them all; and it was not less difficult to prevent an illicit intercourse of these islanders with China, the Phillipinas, Macassar, and all smuggling vessels or interlopers that should attempt it, The company had still more to fear, that some of the trees might be carried off, and that people might succeed in planting them elsewhere. They resolved therefore to destroy as far as they could the spice trees in all the islands, only leaving them on some small islands, which might easily be kept; then nothing remained, but to fortify well these precious depositories. They were obliged to keep those sovereigns in pay, whose revenues confined chiefly of this drug, in order to engage them to consent, that the fountain thereof should be annihilated. Such is the subsidy of 20,000 rix-dollars, which the Dutch company pays annually the king of Ternate and some other princes of the Moluccas. When they could not prevail on any one of these sovereigns to burn his spice-plants, they burnt them in spite of him, if they were the strongest; or else they annually bought up the green leaves of the trees, well knowing that they would perish, after being for three years thus robbed of their foliage, which the Indians were doubtless ignorant of.

By this means, whilst cinnamon is gathered upon Ceylon only, Banda alone has been consecrated to the culture of nutmegs; Amboina, and Uleaster, adjoining to it, to that of cloves, without its being allowed to cultivate either cloves at Banda, or nutmegs at Amboina. These places furnish more than the whole world can consume. The other stations of the Dutch, in the Moluccas, are intended to prevent other nations from settling there, to make continual searches for discovering and burning all the spice-trees, and to furnish subsistence for those isles where they are cultivated. Upon the whole, all the engineers and mariners employed in this part, are obliged when they leave the service, to give up all their charts and plans, and to make oath that they keep none. It is not long since that an inhabitant of Batavia has been whipped, branded, and banished to a distant isle, for having shewed a plan of the Moluccas to an Englishman. The spice-harvest begins in December, and the ships which are destined to take in ladings of it, arrive at Amboina and Banda in the course of January, and go from thence for Batavia in April and May. Two ships likewise go annually to Ternate, and their voyages are regulated by the monsoons. These are likewise some snows of twelve, or fourteen guns, destined to cruize in these parts.

Every year the governors of Amboina and Banda assemble, towards the middle of September, all the orencaies or chiefs in their department. They at first give them feasts and entertainments for several days; and then they set out with them in a kind of large boats, called *coracores*, in order to visit their governments, and burn all the superfluous spice-plants. The chiefs of every particular factory are obliged to come to their governors-general, and to accompany them on this visitation, which generally ends with the end of October, or at the beginning of November; and the return from this tour is celebrated by new festivals. When we were at Boero, M. Ouman was preparing to set out for Amboina, with the Orencaies of his island.

The Dutch are now at war with the inhabitants of Ceram; an island that is very rich in cloves. Its inhabitants would not suffer their plants to be extirpated, and have driven the company from the principal stations which they occupied on their ground; they have only kept the little factory of Savai, situated in the northern part of the isle, where they keep a serjeant and fifteen men. The Ceramese have fire-arms and gun-powder, and they all speak the Malayo pretty well, besides their national jargon. The inhabitants of Papua are likewise constantly at war with the company and their vassals. They have been seen in vessels armed with pedereroes, and containing two hundred men. The king of Salviati, [1]

which is one of their greatest islands, has been taken by surprise, as he was going to do homage to the king of Ternate, whose vassal he was, and the Dutch keep him prisoner.

Nothing can be better contrived than the above plan and no measures could be better concerted for establishing and keeping up an exclusive commerce. Accordingly the company have long enjoyed it; and owe that splendour to it, which makes them more like a powerful republic, than a society of merchants. But I am much mistaken, or the time is nigh at hand, when this commerce will receive a mortal stroke. I may venture to say, that to desire the destruction of this exclusive trade, would be enough to effect it. The greatest safety of the Dutch consists in the ignorance of the rest of Europe concerning the true state of these isles, and in the mysterious clouds which wrap this garden of the Hesperides in darkness. But there are difficulties which the force of man cannot overcome, and inconveniencies for which all his wisdom cannot find a remedy. The Dutch may construct respectable fortifications at Amboina and Banda; they may supply them with numerous garrisons; but when some years have elapsed, an almost periodical earthquake ruins these works to the very foundations; and every year the malignity of the climate carries off two thirds of the soldiers, mariners, and workmen which are sent thither. These are evils without remedy; the forts of Banda, which have thus been overthrown three years ago, are but just rebuilt; and those of Amboina are still in ruins. The company may likewise have been able to destroy in some isles, a part of the known spices; but there are isles which they do not know, and others too, which they are acquainted with, but which defend themselves against their efforts.

The English now frequent the Moluccas very much; and this is doubtless not done without some design. Several years ago, some small vessels sailed from Bencoolen, and came to examine the passages, and pick up the necessary intelligence concerning this difficult navigation. We have seen above, that the natives of Bouton told us of three English ships lately passing through those straits; we have likewise made mention of the assistance they gave to the unfortunate sovereign of Balimbuan; and it seems to be certain, that they likewise furnish the Ceramese with powder and arms; they had even built them a fort, which captain le Clerc told us he had destroyed, and in which he had found two pieces of cannon. In 1764, M. Watson, who commanded the Kingsberg, a frigate of twenty-six guns, came to the entrance of Savaiï, obliged the people, by firing muskets at them, to give him a pilot, who could bring him to the anchorage, and committed many outrages in that weak factory. He likewise made some attempt against the people of Papua; but it did not succeed. His longboat was seized by the Indians, and all the Europeans in it, among the rest, a son of lord Sandwich's, who was a midshipman, and commanded the boat, were fastened to posts, circumcised, and then cruelly murdered. [1]

It seems, upon the whole, as if the English do not mean to hide their projects from the Dutch company. About four years ago they formed a station in one of the isles of Papua, called *Soloo* or *Tasara*. M. Dalrymple, who founded it, was its first governor; but the English kept it only for three years. They have now abandoned it, and M. Dalrymple came to Batavia in 1768, on board the *Patty*, captain Dodwell, from whence he went to Bencoolen, where the *Patty* sunk in the road. [2] This station furnished bird's nests, mother of pearl, ivory, pearls, and *tripans*. or *swallops*, a kind of glue or froth, of which the Chinese are very fond.

1 Lord Sandwich's son never was in any of these expeditions; it therefore is evident, that M. de Bougainville has been misinformed in regard to this particular. F.

2 Mr. Dalrymple never was at Batavia, nor Bencoolen; he left China in January 1765, and arrived in England in July 1765, since when he has never been put of the kingdom. From whence it must be obvious, M. de Bougainville is entirely mistaken in what he says concerning M. Dalrymple.

What I find extraordinary is, their coming to sell their cargoes at Batavia; which I know from the merchant who bought them. The same man assured me that the English likewise got spices by means of this station; perhaps they obtained them from the Ceramese. I cannot say why they have abandoned it. It is possible, that they may already have got a great number of spice-trees transplanted in one of their possessions in India, and that believing they were sure of their success, they have abandoned an expensive station, which is but too sufficient to alarm one nation, and give information to another. At Batavia we had the first account of the ships, of which we had met with the traces several times on our voyage. Mr. Wallace arrived at Batavia in January 1768, and sailed from thence again almost immediately. Mr. Carteret who was involuntarily separated from his chief, soon after leaving the straits of Magalhaens, has made a much longer voyage, and his adventures I believe must have been far more complicated. He came to Macassar at the end of March of the same year, having lost almost all his crew, and his ship being in a rotten condition. The Dutch would not bear him at Jonpandam, and sent him back to Bontain, hardly consenting to his taking Moors to replace the loss of his people; after staying two months in the isle of Celebes, he came to Batavia on the 3d of June, careened there, and sailed from thence the 15th of September, that is, only twelve days before we arrived there. M. Carteret has said very little about his voyage here; however, he has mentioned enough to let the people know, that in a passage by him called St. George's strait, he had had a fight with the Indians, whose arrows he shewed, with which they have wounded several of his people, and among the rest, the next in command after him, who even left Batavia without being cured.

1768. October. Diseases contracted at Batavia.

We had scarce been above eight or ten days at Batavia, when the diseases began to make their appearance. From the best state of health, in all appearance, people were in three days brought to the grave. Several of us fell ill of violent fevers, and our sick found no relief at the hospital. I accelerated as much as I could the dispatch of our affairs ; but our sabandar likewise falling sick, and not being able to do any business, we met with difficulties and delays. I was not ready before the 16th of October to go out, and I weighed, in order to anchor without the road. The *Etoile* was to get her biscuit on board that day. She completed the stowing of it in the night, and as soon as the wind permitted, she came to anchor near us. Almost every officer on board my ship was already sick, or felt a disposition towards it. The number of fluxes had not decreased among the crews, and if we had made a longer stay at Batavia, it would certainly have made greater havock among us than the whole voyage. Our man from Taiti, who had doubtless been sheltered from the influence of the climate by the extasy into which every thing that he saw threw him, fell sick during the last days, and his illness has been of a long duration, though his docility in taking physick was quite equal to that of a man born at Paris: however, when he speaks of Batavia, he always calls it the land which kills, *enoua maté*.

CHAP. IX.

Departure from Batavia touching at the isle of France; return to France.

THE 16th of October, I set sail alone from the road of Batavia, in order to anchor in seven fathom and a half, bottom of soft ooze, about a league in the offing. I was thus half a mile W. N. W. of the beacon, which is left on the starboard side, when you enter the road of Batavia. The isle of Edam bore N. N. E. $\frac{1}{2}$ E. three leagues. Onrust, N. W. by W. two leagues and a third. Rotterdam, N. 2° W. a league and a half. The Etoile, who could not get her bread before it was late, weighed at three o'clock in the morning; and steering for the lights, which I kept lighted all night, she came to an anchor near me.

Particulars concerning the course which must be taken in going out of Batavia.

As the course for leaving Batavia is interesting, I hope I shall be allowed to mention the particulars of that which I have taken. On the 17th we were under sail, by five o'clock in the morning, and we steered N. by E. in order to pass to the eastward of the isle of Rotterdam, about half a league; then N. W. by N. in order to pass to the southward of Horn and Harlem; then W. by N. and W. by S. to range to the northward of the isles of Amsterdam and Middleburg, upon the last of which there is a flag; then west, leaving on the starboard side a beacon, placed south of the Small Cambuis. At noon we observed in $5^{\circ} 55'$ of south latitude, and we were then north and south with the S. E. point of the Great Cambuis, about one mile. From thence I steered between two beacons, placed, the one to the southward of the N. W. point of the Great Cambuis, the other east and west of the isle of Anthropophagi, or Canibals, otherwise called Pulo Laki. Then you range the coast at what distance you will or can. At half past five o'clock, the currents setting us towards the shore, I let go a stream-anchor in eleven fathoms, oozy bottom, the N. W. point of the bay of Bantam bearing W. 9° N. about five leagues, and the middle of Pulo Baby, N. W. $\frac{1}{2}$ W. three leagues.

In order to sail out of Batavia, there is another passage besides that which I have taken. When you leave the road, range the coast of Java, leaving on the larboard side a buoy, which serves as a beacon, about two leagues and a half from the town; then you range the isle of Kepert to the southward; you follow the direction of the coast, and pass between two beacons, situated, the one to the southward of Middelburg island, the other opposite this, on a bank which joins to the point of the main land; you then find the beacon, which lies to the southward of the small Cambuis, and then the two routes unite. The particular chart which I give of the run from Batavia, exactly points out both tracks.

Clearing the strait of Sonda.

The 18th, at two o'clock in the morning we were under sail; but we were forced to anchor again in the evening: it was not till the 19th in the afternoon that we cleared the straits of Sonda, passing to the northward of Prince's island. At noon we observed in $6^{\circ} 30'$ south latitude, and at four o'clock in the afternoon, being about four leagues off the N. W. point of Prince's island, I took my departure upon the chart of M. d'Après, in $6^{\circ} 21'$ south lat. and 102° east longitude, from the meridian of Paris. In general, you can anchor every where along the coast of Java. The Dutch keep some small stations on it, at short distances from each other, and every station has orders to tend a soldier on board the ships which pass, with a register, on which he begs that the ship's name, from, whence she come, and whither she is bound, may be inscribed. You put into this register what you please; but I am far from blaming the custom of keeping it, as it may be

the means of getting news of a ship, concerning which, one is often in great anxiety, and as the soldier who carries it on board always brings along with him fowls, turtle, and other refreshments, which he turns to good account; There was now no longer any scorbutic complaint, at least, no apparent one on board my ships; but several of the crew were ill of a bloody-flux. I therefore resolved to shape my course for the Isle of France, without waiting for the Etoile, and on the 20th I made her the signal for that purpose.

Run to the isle of France.

In this run we found nothing remarkable, except the fine weather, which has much shortened the voyage. We had constantly a very fresh wind at S. E. Indeed we stood in need of it, for the number of the diseased encreased daily, they recovered but slowly, and besides the bloody-flux, some were likewise afflicted with hot fevers, of which one of my carpenters died in the night between the 30th and the 31st. My masts likewise gave me much concern; I had reason to fear that the main-mast would break five or six feet below the cat-harpings; we fished it, and to ease it, we got down the main-top-gallant-mast, and always kept two reefs in the main-top-sail.

1768. September. Sight of the isle of Rodrigue.

These precautions considerably retarded our run; yet notwithstanding this, on the 18th day after leaving Batavia, we got sight of the Isle of Rodrigue [1] and the second day after that, of the Isle of France,

The 5th of November, at four o'clock in the evening, we were north and south of the north east point of the Isle of Rodrigue, whence I concluded the following difference in our reckoning from Prince's island to Rodrigue. M. Pingré has there observed $60^{\circ} 52'$ east longitude from Paris, and at four o'clock, I was, by my reckoning, in $61^{\circ} 26'$. These supposing, that the observation made upon the isle at the habitation, had been taken two minutes to the westward of the point with which I bore north and south at four o'clock, my difference in a run of twelve hundred leagues, was thirty-four minutes a-stern of the ship; the difference of the observations made on the 3d, by M. Verron, gave for the same time $1^{\circ} 12'$ a-head of the ship.

Land-fall at the Isle of France.

We had sight of Round Island the 7th at noon; at five o'clock in the evening we bore north and south with its middle. We fired some guns at the beginning of night, hoping that the fire on the Cannoniers Point would be lighted; but this fire, which M. d'Après mentions in his instructions is now never lighted; so that, after doubling the Coin de Mire, which you may range as close as you please, I was much embarrassed in order to avoid a dangerous shoal, which runs above half a league out into the sea off the Cannoniers Point. I kept plying, in order to keep to windward of the port, firing a gun from time to time; at last, between eleven and twelve o'clock at night, one of the pilots of the harbour, who are paid by the king, came on board.

Danger which the frigate run.

I then thought I was out of danger, and had given him the charge of the ship, when at half past three o'clock he run us a-ground, near the Bay of Tombs. Luckily there was no swell; and the manœuvre which we quickly made, in order to endeavour to cast the ship off shore, succeeded;

1 Diego Rays. F.

but it may easily be conceived, how great our grief would have been, if after happily avoiding so many dangers, we had been cast away close to our port, through the fault of an ignorant fellow, to whom we were obliged to leave the management of the ship, by the regulation of the service.

We got off with the loss of only forty-five feet of our false keel, which was carried away.

Nautical advice.

This accident, of which we had like to have been the victims, gives me an opportunity of making the following reflection: When you are bound for the Isle of France and see that it is impossible to reach the entrance of the port in day-time, prudence requires, that you must take care in time, not to be too much entangled with the land. It is necessary to keep all night on the off side, and to windward of Round island, not lying-to, but plying to windward, under a good deal of sail, on account of the currents. Besides, there is anchorage between the little isles; we have found from thirty to twenty-five fathom there, and a sandy bottom; but one must only anchor there in an extreme case of necessity.

Anchorage of the Isle of France.

On the 8th, in the morning, we entered the port, where we moored that day. The Etoile appeared at six o'clock in the evening, but could not come in till the next morning. Here we found our reckoning was a day too late, and we again followed the date of the whole world.

Particulars of our proceedings there.

The first day of my arrival, I sent all my sick people to the hospital, I gave in an account of what I wanted in provisions and stores, and we immediately fell to work in preparing the frigate for heaving down. I took all the workmen in the port, that could be spared, and those of the Etoile, being determined to depart as soon as I should be ready. The 16th and 18th we breamed the frigate. We found her sheathing worm-eaten, but her bottom was as sound as when she came off the stocks.

We were obliged to change some of our masts here. Our main-mast had a defect in the heel, and therefore might give way there, as well as in the head, where the main-piece was broken. I got a main-mast all off one piece, two top-masts, anchors, cables, and some twine, which we were in absolute want of. I returned my old provisions into the king's stores, and took others for five months. I likewise delivered to M. Poivre, the *intendant* of the Isle of France, all the iron and nails embarked on board the Etoile; my alembic and recipient, many medicines, and a number of merchandises, which now became useless to us, and were wanted in this colony. I likewise gave three and twenty soldiers to the legion, as they asked my leave to be incorporated in it, Messieurs Commerçon and Verron, both consented to defer their return to France; the former, in order to enquire into the natural history of these isles, and of Madagascar; the latter, in order to be more ready to go and observe the transit of Venus in India; I was likewise desired to leave behind M. de Romainville, an engineer, some young volunteers, and some under-pilots, for the navigation in the several parts of India.

Loss of two officers.

We were happy, after so long a voyage, to be still in a condition to enrich this colony with men and necessary goods. The joy which I felt on this occasion, was cruelly converted into grief, by the loss which we here suffered, by the death of the chevalier du Bouchage, ensign of the king's

ships, and a man of distinguished merit, who joined all the qualities of the heart and mind which endear a man to his friends, to that knowledge which forms a complete sea-officer. The friendly care and all the skill of M. de la Porte, our surgeon, could not save him. He expired in my arms, the 19th of November, of a flux, which had begun at Batavia. A few days after, a young son of M. le Moyne, *commissaire-ordonnateur* of the marine, who embarked as a volunteer with me, and had lately been made a *garde de la marine* [1] died of a pectoral disease.

In the Isle of France I admired the forges, which have been established there by Messrs. Rosting and Hermans. There are few so fine ones in Europe, and the iron which they make is of the best kind. It is inconceivable how much perseverance, and how great abilities have been necessary to make this undertaking more complete, and what sums it has cost. He has now nine hundred negroes, from which M. Hermans has drawn out and exercised a battalion of two hundred men, who are animated by a kind of ambition. They are very nice in the choice of their comrades, and refuse to admit all those who have been guilty of the least roguery. Thus we see sentiments of honour combined with slavery. [2]

1768. December.

During our stay here, we constantly enjoyed the fairest weather imaginable. The 5th of December, the sky began to be covered with thick clouds, the mountains were wrapt in fogs; and every thing announced the approaching season of rain, and the hurricane which is felt in

Departure from the Isle of France.

these isles almost every year. The 10th I was ready to set sail. The rain and the wind right on end did not allow it. I could not sail till the 12th in the morning, leaving the *Etoile* just when she was going to be careened. This vessel could not be fit for going out before the end of the month, and our junction was now no longer necessary. This store-ship left the isle of France towards the end of December, and arrived in France a month after me. I took my departure at noon, in the observed S. lat. of 20° 22' and 54⁰ 40' east longitude from Paris.

1 Equal to our midshipman. F.

2 We are very ready to do justice to Mr. Bougainville, when he presents us with a new and interesting observation; but when he, without the least necessity, becomes the advocate of tyranny and oppression, we cannot let these sentiments pass unnoticed. It would have appeared to us impossible, that such an idea as this could enter into any man's head who is in his right senses: he wrote down this strange assertion, either being carried away by the itch to say something extraordinary and paradoxical, or in order to make slavery more tolerable to his fellow Frenchmen--Slavery endeavours to extirpate and to smother all sentiments of honour, which only can operate in the breast of a really free man; true honour, therefore, and slavery, are in direct opposition, and can be combined as little as fire and water. If Mr. B. threw this sentence out, in order to alleviate the yoke of tyranny his country groans under, we think we could excuse it in some measure, as he would then act from principles of humanity. But if the irresistible desire of saying something new was the prevalent motive with him, it has much the appearance as if he were willing to insult the poor victims of despotism. The generous and amiable character which M. B. from other instances appears in, prompts us to wish, that this sentence had been omitted by him. F.

Run to the Cape of Good Hope.

The weather was at first very cloudy, with squalls and rain. We could not see the isle of Bourbon. As we got further from the land, the weather cleared up by degrees. The wind was fair and blew fresh; but our new main-mast soon caused us as much anxiety as the first. It described so considerable an arch at the head, that I durst not make use of the top gallant-sail, nor carry the top-sails hoisted up.

Bad weather which we meet with.

From the 22d of December to the 8th of January, we had a constant head-wind, bad weather, or calms. I was told, that these west winds were quite without example at this season. They however retarded us for a fortnight successively, during which we kept trying or beating to windward with a very great sea. We got sight of the coast of Africa before we had any soundings. When we first saw this land, which we took to be the Cape of Shoals, (*Cabo des Baxos*) we had no bottom. On the 30th we sounded 78 fathom, and from that day we kept on

1768. January.

Bank Aguilhas, being almost constantly in sight of the land. We soon fell in with several Dutch ships, of the Batavia fleet; their forerunner set sail from thence on the 20th of October, and the fleet the 6th of November; the Dutch were still more surprised than we were at the westerly winds blowing so much out of season.

Nautical advice.

At last, on the 18th of January in the morning, we had sight of Cape False, and soon after of the land of the Cape of Good Hope. I must here observe, that five leagues E. S. E. of Cape False, there is a very dangerous rock under the water; that to the eastward of the Cape of Good Hope, there is a reef extending about one third of a league to the offing, and that at the foot of the Cape itself there is a rock running out to sea to the same distance. I was come up with a Dutch ship, which I had perceived in the morning, and I had shortened sail, in order not to pass by her, but to follow her if she intended to enter in the night-time. At seven o'clock in the evening, she took in her top-gallant-sails, studding-sails, and even top-sails; I then stood out to sea, and plyed all night, with a very fresh southerly wind, varying from S. S. E. to S. S. W.

At day-break, the currents had set us near nine leagues to the W. N. W. the Dutch ship was above four leagues to the leeward of us, and we were obliged to croud sail, in order to make good again what we had lost. Therefore those who must pass the night on their boards, with the intention of entering the bay of the Cape in the morning, would do well to bring-to at the eastern point of the Cape of Good Hope, keeping about three leagues off shore; being in this position, the currents will set them in a good situation for entering early in the morning. At nine o'clock in the morning we anchored in Table-bay, at the Cape, at the head of the road, and we moored N. N. E. and S. S. W. Here were fourteen ships of several nations, and several others arrived during our stay. Captain Carteret had sailed from hence on Epiphany-day. We saluted the town with fifteen guns, and they returned the salute with an equal number.

We touch at the Cape of Good Hope.

We had all possible reasons to be content with the governor and inhabitants of the Cape of Good Hope; they were desirous of procuring us all that is useful and agreeable. I shall not stop to describe this place, which every body knows. The Cape immediately depends upon Europe,

and not upon Batavia, neither with regard to its civil and military administration, nor to the appointment of persons to places. It is even sufficient to have had an employment at the Cape, to exclude one from obtaining one at Batavia. However, the council of the Cape corresponds with that of Batavia, with regard to commercial affairs. It consists of eight persons, among which is the governor who is the president. The governor does not belong to the court of justice, where the second in command presides; he only signs the sentences of death.

There is a military station at False Bay, and one at the bay of Saldagna. The latter, which forms an excellent harbour, sheltered from all winds, could not be made the chief place, because it has no water. They are now working to encrease the settlement at False Bay; there the ships anchor in winter, when they are forbid lying in the bay of the Cape. There you find the same assistance, and every thing as cheap as at the Cape itself. The distance over land of these two places, is eight leagues, and the road very bad.

Particulars concerning the vineyard at Constantia.

Nearly half way between them both is the district of Constantia, which produces the famous wine of that name. This vineyard, where they cultivate the Spanish muscade vines, is very small, but it is not true that it belongs to the company, or that it is surrounded, as people believe here, by walls, and watched. It is distinguished into High and Little Constantia, separated by a hedge, and belonging to two different proprietors. The wine which is made there is nearly alike in quality, though each of the two Constantias has its partisans. In common years they make a hundred and twenty or a hundred and thirty *barriques* of this wine, of which the company takes a third at a stated price, and the rest is sold to every buyer that offers. The price at present is thirty piastres or dollars the barrel of seventy bottles of white wine, and thirty-five piastres for the same quantity of red wine. My officers and myself went to dine with M, Vanderspie, the proprietor of High Constantia. He treated us in the best manner possible, and there drank a good deal of his wine, both at dinner, and in tasting the different sorts, in order to make our provision of them.

The soil of Constantia is a sandy gravel, lying on a gentle slope. They cultivate the vines without props, and leave only a small number of buds when they cut them. They make the wine by putting the grapes without their grains into the vessel. The full casks are kept in a cellar level with the ground, in which the air has a free circulation. As we returned from Constantia, we visited two country-houses belonging to the governor. The largest, named Newland, has a garden which is much larger than the company's, at the Cape. This last we have found much inferior to the reputation it has acquired. Some long walks of very high horn-beams, give it the appearance of a garden for fryars, and it is planted with oaks, which thrive very ill there.

Situation of the Dutch at the Cape.

The Dutch plantations have spread very much on the whole coast, and plenty is every where the consequence of cultivation, because the cultivator is free, subject to the laws only, and sure of his property. There are inhabitants almost a hundred and fifty leagues off the capital; they have no other enemies to fear than the wild beads; for the Hottentots do not molest them. One of the fined parts of the Cape is the colony, which has been called Little Rochelle. This is a settlement of French, driven out of France by the repeal of the edict of Nantes. It surpasses all the rest in the fertility of the soil, and the industry of the colonists. They have given this adopted mother the name of their old country, which they still love, though it has treated them so hardly. The government sends caravans out from time to time to search the interior parts of the country. One was out for eight months in 1763. This detachment advanced to the northward, and made, as I was told, some important discoveries; however, this journey had not the success which one

might have expected; discontent and discord got amongst them, and forced the chief to return home, leaving his discoveries imperfect. The Dutch got sight of a yellow nation, with long hair, and seeming very ferocious to them.

On this journey they found a quadruped of seventeen feet high of which I have given the drawing to M. de Busson; it was a female suckling a young one, (fawn) which was only seven feet high. They killed the mother, and took the fawn alive, but it died after a few days march. M. de Busson assured me that this is the animal which naturalists call the *giraffe*. None of them had been seen after that which was brought to Rome in the time of Cæsar, and shewn there in the amphitheatre. About three years ago they have likewise found and brought to the Cape, a quadruped of great beauty, which is related to the ox, horse, and stag, and of which the genus is entirely new. It only lived two months at the Cape; I have likewise given M. de Busson an exact drawing of this animal, whose strength and fleetness equal its beauty. Is not without reason that Africa has been named the mother of monsters.

Departure from the Cape.

Being provided with good provisions, wines, and refreshments of all sorts, we set sail from the road of the Cape the 17th in the afternoon. We passed between the isle of Roben and the coast; at six o'clock in the evening, the middle of that isle bore S. by E. $\frac{1}{2}$ E. about four leagues distant, from whence I took my departure in $33^{\circ} 40'$ south latitude, and $15^{\circ} 48'$ east longitude from Paris, I wanted to join M. Carteret, over whom I had certainly a great advantage in sailing; but he was still eleven days before me.

I directed my course so as to get sight of St. Helena, in order to make sure of putting in at Ascension island, an anchorage which I intended to make beneficial to my crew. Indeed we got

Sight of St. Helena.

sight of it the 29th, at two o'clock after noon, and the bearings which we set of it gave us no more than eight or ten leagues difference in our reckoning. In the night between the 3d to the

1769. February.

4th of February, being in the latitude of Ascension island, and being about eighteen leagues from it by my reckoning, I went only under the two top-sails. At day-break we saw the isle nearly nine leagues distant, and at eleven o'clock we anchored in the north west creek, or Creek of the Mountain of the Cross, in twelve fathoms, bottom of sand and coral. According to the Abbé la Caille's observations, this anchorage is in $7^{\circ} 54'$ south latitude, and $16^{\circ} 19'$ west longitude from Paris.

Stopping at Ascension.

We had hardly cast anchor, when I hoisted out the boats, and sent out three detachments to catch turtle; the first in the N. E. creek, the second in the N. W. creek, opposite which we were; and the third in the English creek, which is in the S. W. of the island. Every thing promised a favourable capture; there was no other ship than ours, the season was advantageous, and we entered with the new moon. As soon as the detachments were set off, I made every thing ready for fishing my two greater masts under the rigging, viz. the main mast with a fore-top-mast, the heel upwards; and the fore-mast which was split horizontally between the cheeks, with an oak fish.

In the afternoon the bottle was brought to me which contains the paper whereon the ships of every nation generally write their name, when they touch at Ascension island. This bottle is deposited in a cavity of the rocks of this bay, where it is equally sheltered from rain and the spray of the sea. In it I found written the Swallow, that English ship which captain Carteret commanded, and which I was desirous of joining. He arrived here the 31st of January, and set sail again on the first of February; thus we had already gained six days upon him, after leaving the cape of Good Hope. I inscribed the Boudeuse, and sent back the bottle.

The 5th was spent in fishing our masts under the rigging, which is a very nice operation in a road where the sea is rough; in over-hauling our rigging, and embarking the turtle. The fishery was abundant; seventy turtle had been turned in the night, but we could only take on board fifty-six, the others were set at liberty again. We observed at our anchorage $9^{\circ} 45'$, variation N.

Departure from Ascension.

W. The 6th, at three o'clock in the morning, the turtle being got on board, and the boats hoisted in, we began to weigh our anchors; at five o'clock we were under sail, happy on account of our capture, and of the hope that our next anchorage would be in our own country. Indeed, we had had a great many since our departure from Brest.

In leaving Ascension isle, I kept my wind in order to range the Cape Verd isles as close as

Passing of the line.

possible. The 11th in the morning we passed the line for the sixth time on this voyage, in 20° of estimated longitude. Some days after, when, notwithstanding the fish with which we had strengthened our fore-mast, it cut a very bad figure, we were obliged to support it by preventer-shrouds, getting down the fore-top-gallant-mast, and almost always keeping the fore-top-sail close reefed, and sometimes handed.

Meeting with the Swallow.

The 25th in the evening we perceived a ship to windward, and a-head of us; we kept sight of her during the night, and joined her the next morning; it was the Swallow. I offered captain Carteret all the services that one may render to another at sea. He wanted nothing, but upon his telling me that they had given him letters for France at the Cape, I sent on board for them. He presented me with an arrow which he had got in one of the isles he had found on his voyage round the world, a voyage that he was far from suspecting we had likewise made. His ship was very small, went very ill, and when we took leave of him, he remained as it were at anchor. How much he must have suffered in so bad a vessel, may well be conceived. There were eight leagues difference between his estimated longitude and ours; he reckoned himself so much more to the westward.

1769. March. Error in the reckoning of our course.

We expected to pass to the eastward of the Açores, when the 4th of March in the morning we had sight of the Isle of Tercera, which we doubled in day-time, ranging very close along it. The sight of this isle, supposing it well placed on M. Bellin's great chart, would give us about sixty-seven leagues of error to the westward, in the reckoning of our run which indeed is a considerable error on so short a track as that from Ascension to the Açores. It is true that the position of these isles in longitude, is still uncertain. But I believe, that in the neighbourhood of the Cape Verd islands, there are very strong currents. However, it was essential to us to

determine the longitude of the Açores by good astronomical observations, and to settle their distances and bearings among themselves. Nothing of all this is accurate on the charts of any nation. They only differ by a greater or lesser degree of error. This important task has just been executed by M. de Fleurieu, ensign of the king's ships.

I corrected my longitude in leaving the Isle of Tercera, by that which M. de Bellin's great chart assigns to it. We had soundings the 13th in the afternoon, and the 14th in the morning we had

Sight of Ushant.

sight of Ushant. As the wind was scant, and the tide contrary to double this island, we were forced to stand off, the wind blowing very fresh at west, and a very great sea. About ten o'clock

Squall which damaged our rigging.

in the morning, in a violent squall, the fore-yard broke between the two jear-blocks, and the main-sail at the same instant was blown out of the bolt-rope from clue to ear-ring. We immediately brought to under our main, fore, and mizen-stay-sails, and we set about repairing the damage; we bent a new main-sail, made a fore-yard with a mizen yard, a main-top-sail-yard, and a studding-sail-boom, and at four o'clock we were again enabled to make sail. We had lost sight of Ushant, and whilst we lay-to, the wind and sea drove us into the channel.

Arrival at St. Maloes.

Being determined to put into Brest, I resolved to ply with variable winds, from S. W. to N. W. when the 15th in the morning our people came to inform me, that our fore-mast was near being carried away under the rigging. The shock it had received when its yard broke, had made it worse; and though we had eased its head by lowering the yard, taking in the reefs in the fore-sail, and keeping the fore-top-sail upon the cap close reefed, yet we found, after an attentive examination, that this mast could not long resist the pitching caused by the great sea, we being close-hauled; besides this, all our rigging and blocks were rotten, and we had none to replace them; then how was it possible in such a condition to combat the bad weather of the equinoxes between two coasts? I therefore resolved to bear away, and conduct the frigate to St. Maloes. That was then the nearest port, which could serve us as an asylum. I entered it on the 16th in the afternoon, having lost only seven men, during two years and four months, which were expired since we had left Nantes.

Puppibus & læti Nautæ imposuere Coronas.

VIRG, Æneid. Lib. iv.

VOCABULARY
OF THE LANGUAGE OF
TAITI ISLAND.

A

ABOBO [1]	<i>Tomorrow.</i>
Aibou	<i>Come.</i>
Ainé	<i>Girl, (fille)</i>
Aiouta	<i>There is some</i>
Aipa	<i>The term of negation, there is none.</i>
Aneania	<i>Importune, tedious.</i>
Aouaou	<i>Fy; term of contempt and of displeasure.</i>
Aouereré	<i>Black.</i>
Aouero	<i>Egg.</i>
Aouri	<i>Iron, gold, silver every metal, or instrument of metal.</i>
Aoutti	<i>Flying fish.</i>
Aouira	<i>Lightning.</i>
Apalari	<i>To break or destroy.</i>
Ari	<i>Cocoa-nut.</i>
Arioi	<i>Bachelor, and a man without children.</i>
Ateatea	<i>White.</i>

I know of no word that begin with these consonants of ours, B, C, D.

E.

Ea	<i>Root.</i>
Eaï	<i>Fire.</i>
Eaia	<i>Parroquet.</i>
Eaiabou	<i>Vase.</i>

I must here observe, that I have not altered the spelling of the words at all: and the reader will therefore take notice, that they should be pronounced according to the rules of the French language. F.

Eaiabou-maa	<i>Vase which is used to put their victuals in.</i>
Eame	<i>Drink made of cocoa nuts.</i>
Eani	<i>All manner of fighting.</i>
Eao	<i>Clouds, also a flower in bud, before it opens.</i>
Eatoua	<i>Divinity. The same word likewise expresses his ministers and also the subordinate good or evil genii.</i>
Eeva	<i>Mourning.</i>
Eie	<i>Sail of a periagua.</i>
Eiva-eoura	<i>Dance or festival of the Taitians.</i>
Eivi	<i>Little.</i>
Eite	<i>To understand.</i>
Elao	<i>A fly.</i>
Emaa	<i>A sting.</i>
Emao	<i>A shark, it likewise signifies to bite.</i>
Emeitai	<i>To give.</i>
Emoé	<i>To sleep.</i>
Enapo	<i>Yesterday.</i>
Enene	<i>To discharge.</i>
Enia	<i>In, upon.</i>
Enninnito	<i>To stretch ones self, yawning.</i>
Enoanoa	<i>To smell well.</i>
Enomoi	<i>Term to call, come hither.</i>
Enoo-te-papa	<i>Sit down.</i>
Enoua	<i>The earth and its different parts (a country).</i>
Endua-Taiti	<i>The country of Taiti.</i>
Enoua-Paris	<i>The country of Paris.</i>
Eo	<i>To sweat.</i>
Eoe-tea	<i>An arrow.</i>
Eoe-pai	<i>A paddle or oar.</i>
Emoure-papa	<i>The tree from which they get the cottons or substance for their stuffs, the cloth-tree.</i>
Eone	<i>Sand, dust</i>
Eonou	<i>Turtle</i>

Eote	<i>To kiss (baiser).</i>
Eouai	<i>Rain.</i>
Eonao	<i>To steal or rob.</i>
Eououa	<i>Pimples in the face.</i>
Eoui	<i>To belch or eruct.</i>
Eounoa	<i>Daughter-in-law.</i>
Eouramaï	<i>Light (not darkness)</i>
Eouri	<i>A dancer.</i>
Eouriaye	<i>A dancing girl.</i>
Epao	<i>Luminous vapour in the atmosphere, called a shooting-star. AtTaiti they are looked upon as evil genii.</i>
Epata	<i>Exclamation to call one's wife.</i>
Epepe	<i>Butterfly.</i>
Epija	<i>Onion.</i>
Epoumaa	<i>Whistle, they make use of it to call the people to their meals.</i>
Epouponi	<i>To blow the fire.</i>
Epouré	<i>To pray.</i>
Epouta	<i>A wound this word likewise signifies the fear.</i>
Era	<i>The sun.</i>
Era-ouao	<i>Rising sun.</i>
Era-ouopo	<i>Setting sun.</i>
Era-ouavatea	<i>Noon sun.</i>
Eraï	<i>Heaven.</i>
Erepo	<i>Dirty, unclean.</i>
Ero	<i>Ant.</i>
Eri	<i>King.</i>
Erie	<i>Royal.</i>
Eroï	<i>To wash to cleanse.</i>
Eroleva	<i>Slate.</i>
Eroua	<i>A bole.</i>
Erouai	<i>To vomit.</i>
Eroupe	<i>Very large species of blue pigeon, like those which are in the possession of marshal Soubise.</i>
Etai	<i>Sea.</i>

Etao	<i>To dart, or throw.</i>
Etaye	<i>To weep.</i>
Eteina	<i>Elder brother or sister.</i>
Etouana	<i>Younger brother or sister.</i>
Etere	<i>To go.</i>
Etere-maine	<i>To come back.</i>
<i>Etio</i>	<i>Oyster.</i>
Etipi	<i>To cut, cut (particip.)</i>
Etoi	<i>A hatchet.</i>
Etoumou	<i>A turtle dove.</i>
Etouna	<i>An eel</i>
Eiooua	<i>To grate.</i>
Evai	<i>The water.</i>
Evaie	<i>Moist.</i>
Evaine	<i>A woman.</i>
Enana	<i>A bowl.</i>
Evare	<i>A house.</i>
Evaroua-t-eatoua	<i>A wish to persons when they sneeze, meaning that the evil genius may not lull thee asleep, or that the good genius may awaken thee.</i>
Evero	<i>A lance.</i>
Evetou	<i>A star.</i>
Evetou-eave	<i>A comet.</i>
Evi	<i>An acid fruit, like a pear, and peculiar to Taiti.</i>
Evuvo	<i>A flute.</i>

The following words are pronounced with a long e, like the Greek n.

nti	<i>Wooden figures representing subordinate genii, and called nti-tane, or nti-aïne, according as they are of the masculine or feminine gender, These figures are employed in religious ceremonies, and the people of Taiti have several of them in their houses.</i>
nieie	<i>Basket.</i>
nou	<i>A fart. They detest it, and burn every thing in a house where one has farted.</i>
nouou	<i>A muscle shell (moule.)</i>

nteou-tataou *Colour for marking the body; with it, they make indelible impressions on differed parts of the body.*

nriri, and ouariri *To be vexed, to be angry.*

I know of no word beginning with the consonants F, G.

H.

Horreo *A kind of instrument for soundings made of the heaviest shells.*

I.

Ióre *A rat.*

Ioiroi *To fatigue.*

Iroto *In.*

Ivera *Hot.*

I do not know any of their words beginning with the consonant L.

M.

Maa *Eating.*

Maea *Twin children.*

Maeo *To scratch one's self, to itch.*

Mai *Morels, is likewise said maine; it is an adverb of repetition etere, to go, etere-mai or etere-maine, to go once more, to go and come again.*

Maglli *Cold.*

Mala *More.*

Malama *The moon.*

Maiou *Considerable, great.*

Mama *Light, not heavy.*

Mamai *Sick.*

Manoa *Good-day, your servant, expression of politeness or friendship.*

Manou *A bird, swift (leger.)*

Mao *Hawk for fishing.*

Matai *Wind.*

Matai-malac *East or S. E. wind.*

Matai-aoueraï *West or SW. wind.*

Matao	<i>Fish-hook.</i>
Matapo	<i>One-eyed, squinting.</i>
Matari	<i>The Pleiades.</i>
Matie	<i>Grass herbage.</i>
Mato	<i>Mountain.</i>
Mate	<i>To kill.</i>
Mea	<i>A thing (chose.)</i>
Meia	<i>Banana-tree, bananas.</i>
Metuua	<i>Parents. Metouatane, or eoure, father; Metouaaine, or erao, mother.</i>
Mimi	<i>To make water, to piss.</i>
Móa	<i>Cock, hen.</i>
Moea	<i>Mat.</i>
Mona	<i>Fine, good.</i>
Moreou	<i>A calm.</i>
Motoua	<i>Grand-son.</i>

N

Nate	<i>To give.</i>
Nie	<i>A sail of a boat.</i>
Niouniou	<i>A jonquil.</i>

O

Oaï	<i>Walls and stones</i>
Oaite	<i>To open.</i>
Oorah	<i>The piece of cloth which they wrap themselves in.</i>
Ooróa	<i>Generous, he that gives.</i>
Opoupoui	<i>To drink.</i>
Oualilo	<i>To steal, to rob.</i>
Ouaouara,	<i>Aigret of feathers.</i>
Ouaora	<i>To cure, or cured.</i>
Ouanao	<i>To ly in.</i>
Ouere	<i>To spit.</i>
Ouatere	<i>The helm's-man.</i>

Ouera	<i>Hot.</i>
Oueneo	<i>That does not smell well, it infests.</i>
Ouetopa	<i>To lose, lost.</i>
Ouhi	<i>Ho! Ah! (hé.)</i>
Ouopé	<i>Ripe.</i>
Oupani	<i>Window.</i>
Oura	<i>Red.</i>
Ouri	<i>Dog and quadrupeds.</i>

P

Pai	<i>Periagua.</i>
Paia	<i>Enough.</i>
Papa	<i>Wood, chair, and every piece of furniture of wood.</i>
Papanit	<i>To shut, to stop up.</i>
Paoro	<i>A shell, mother-of-pearl.</i>
Parouai	<i>Dress, cloth.</i>
Patara	<i>Grandfather.</i>
Patiri	<i>Thunder</i>
Picha	<i>Coffer, trunk.</i>
Pirara	<i>Fish.</i>
Piropiro	<i>Stink of a fart, or of excrements.</i>
Pirioi	<i>Lame.</i>
Piripiri	<i>A negative, signifying a covetous man, who gives nothing.</i>
Po	<i>Day, (light)</i>
Póe	<i>Pearl, ornament for the ears.</i>
Poi	<i>For, to.</i>
Poiri	<i>Obscure.</i>
Poria	<i>Fat, lusty, of a good stature.</i>
Porotata	<i>Dog-kennel.</i>
Pouaa	<i>Hog, boar.</i>
Pouerata	<i>Flowers.</i>
Poupoui	<i>Under sail.</i>
Pouta	<i>Wound.</i>
Poto	<i>Little, minute.</i>

I know no word that begins with Q.

R

Rai	<i>Great, big, considerable.</i>
Ratira	<i>Old, aged.</i>
Roa.	<i>Big, very fat.</i>
Roca	<i>Thread.</i>

No word is come to my knowledge beginning with S.

T

Taitai	<i>Salted.</i>
Taio	<i>Friend.</i>
Tamai	<i>Enemy, at war.</i>
Tane	<i>Man, husband.</i>
Tao-titi	<i>Name of the high priestess, who is obliged to perpetual virginity. She has the highest consideration in the country.</i>
Taoa tane	<i>Married woman.</i>
Taporai	<i>To beat, abuse.</i>
Taoua-mai	<i>Physician.</i>
Taoumi	<i>Gorget of ceremony.</i>
Taoumta	<i>Covering of the head.</i>
Taoura	<i>Cord.</i>
Tata	<i>Man.</i>
Tatoue	<i>The act of generation.</i>
Tearea	<i>Yellow.</i>
Teouteou	<i>Servant, slave.</i>
Tero	<i>Black.</i>
Tetouarn	<i>Femme barêe</i>
Tiarai	<i>White flowers, which they wear in their ears instead of ornaments.</i>
Titi	<i>A peg, or pin.</i>
Tinatore	<i>A serpent.</i>
Twa	<i>Strong, malignant, powerful.</i>
Tomaiti	<i>Child.</i>
Toni	<i>Exclamation to call the girls. They add Peio lengthened, or Pijo softly pronounced, like the Spanish j. If the girl slaps her hand on the out-side of the knee, it is a refusal, but if she says enemoi she thereby expresses her consent.</i>

Toto	<i>Blood.</i>
Toiu-pouou	<i>Hump-backed.</i>
Touaine	<i>Brother or sister, by adding the word which distinguishes the sex.</i>
Toubabaou	<i>To weep.</i>
Touie	<i>Lean.</i>
Toumany	<i>Action of fencing; this they do with a piece of wood, armed with a point, made of harder materials than wood. They put themselves in the same posture as we do for fencing.</i>
Toura	<i>Without.</i>
Toutai	<i>To make the natural evacuations.</i>
Toutn	<i>Excrements.</i>
Toupanoa	<i>To open a window or door.</i>
Touroutoto	<i>A decrepit old man.</i>
Toutoi-papa	<i>Light or fire of the great people; niao-papa, light of the common people.</i>

V

Vereva *Flag which is carried before the king and the principal people.*

I know no words beginning with the letters, U,X, Y, Z.

Names of different parts of the body.

Auopo	<i>The crown of the head.</i>
Boho	<i>The skull.</i>
Eouttou	<i>The face.</i>
Mata	<i>The eyes.</i>
Taria	<i>The ears.</i>
Etaa	<i>The jaw.</i>
Eiou	<i>The nose.</i>
Lamolou	<i>The lips.</i>
Ourou	<i>The hairs.</i>
Alielo	<i>The tongue.</i>
Eniou	<i>Teeth.</i>
Eniaou.	<i>Tooth-picks; they make them of wood.</i>
Oumi	<i>The beard.</i>

Papaourou	<i>The cheeks.</i>
Arapoa	<i>The throat.</i>
Taah	<i>Chin.</i>
Eou	<i>Teats, nipples.</i>
Asao	<i>The heart.</i>
Erima	<i>The hand.</i>
Apourima	<i>The inside of the hand.</i>
Eaiou	<i>The nails.</i>
Etoua	<i>The back.</i>
Etaono	<i>The shoulders.</i>
Obou	<i>The bowels.</i>
Tinai	<i>The belly.</i>
Pito	<i>The navel.</i>
Toutaba	<i>The glands of the groin.</i>
Etoe	<i>Buttocks.</i>
Aoua	<i>Thighs.</i>
Eanai	<i>Legs.</i>
Etapoué	<i>The foot.</i>
Eoua	<i>Testicles.</i>
Eoure	<i>The male parts.</i>
Erao	<i>The female parts.</i>
Eorao	<i>The clitoris.</i>

Numerals.

Atai	<i>One.</i>
Aroua.	<i>Two.</i>
Atorou	<i>Three.</i>
Aheho	<i>Four.</i>
Erima	<i>Five.</i>
Aouno	<i>Six.</i>
Ahitou	<i>Seven.</i>
Awarou	<i>Eight.</i>
Ahiva	<i>Nine.</i>
Aourou	<i>Ten.</i>

They have no words to express eleven, twelve, &c. They repeat Atai, Aroua, &c. till to twenty, which they call ataitao. Atairao-mala-atai

<i>Twenty, more one, or twenty one, &c.</i>	
<i>Ataitao-mala-aourou</i>	<i>Thirty, i. e. 20 mere 10.</i>
<i>Aroua-tao</i>	<i>Forty.</i>
<i>Aroua-tao mala atorou</i>	<i>Forty-three, &c.</i>
<i>Aroua-tao mala aourou</i>	<i>Fifty, or 40 more 10.</i>

I could not make Aotourou count beyond his last number.

Names of Plants.

Amiami	<i>Cotyledon.</i>
Amoa	<i>Fern.</i>
Aoute	<i>Rose.</i>
Eaaeo	<i>Sugar-cane.</i>
Eaere	<i>Weeping-willow, or Babylonian willow.</i>
Eaia	<i>Pears.</i>
Eape	<i>Virginian arum.</i>
Eatou	<i>Lys de S. Jaques, a species of lily.</i>
Eoe	<i>Bamboo.</i>
Eóai	<i>Indigo.</i>
Eora	<i>Indian saffron.</i>
Eotonoutou	<i>Figs.</i>
Eoui	<i>Yams.</i>
Epoua	<i>Rhubarb.</i>
Eraca	<i>Chesnuts.</i>
Erca	<i>Ginger.</i>
Etaro	<i>Purple arum.</i>
Eti	<i>Dragon's blood.</i>
Etiare	<i>Grenadille, or passion-flower.</i>
Etoutou	<i>Three leaved sumach.</i>
Maireraro	<i>Rivina.</i>
Mati	<i>Raisins.</i>
Oporo-maa	<i>Pepper.</i>
Pouraou	<i>Cayenne-rose.</i>
Toroire	<i>Heliotropium, or tournesol.</i>

They have a kind of article answering to our articles *of and to (de & à)*. This is the word *te*. Thus they say *parouai-te Aotourou*; the clothes of or (belonging) to Aotourou; *maa-te-eri*. the eating of kings.

THE END

