
CLASSICS TO GO
CAPTAIN COOK'S JOURNAL
DURING HIS FIRST VOYAGE ROUND THE WORLD
JAMES COOK

Captain Cook's Journal

During His First Voyage Round the World

James Cook

PREFACE.

STRANGE it must appear that the account of perhaps the most celebrated and, certainly to the English nation, the most momentous voyage of discovery that has ever taken place--for it practically gave birth to the great Australasian Colonies--has never before been given to the world in the very words of its great leader. It has fallen out in this wise.

After the return of the Endeavour it was decided that a full and comprehensive account of the voyage should be compiled. COOK'S JOURNAL dealt with matters from the point of view of the seaman, the explorer, and the head of the expedition, responsible for life, and for its general success. The Journals of Mr. Banks and Dr. Solander looked from the scientific side on all that presented itself to their enthusiastic observation.

What could be better than to combine these accounts, and make up a complete narrative from them all?

The result, however, according to our nineteenth-century ideas, was not altogether happy. Dr. Hawkesworth, into whose hands the Journals were put, not only interspersed reflections of his own, but managed to impose his own ponderous style upon many of the extracts from the united Journals; and, moreover, as they are all jumbled together, the whole being put into Cook's mouth, it is impossible to know whether we are reading Cook, Banks, Solander, or Hawkesworth himself.

The readers of the day were not, however, critical. Hawkesworth's book,* (* "Hawkesworth's Voyages" 3 volumes quarto 1773.) which undoubtedly contains all the

most generally interesting passages of the three writers, gave a clear description of the events of the voyage in a connected manner, and was accepted as sufficient; and in the excitement of devouring the pages which introduced so many new lands and peoples, probably few wished for more, and the Journals were put away as dealt with.

Since that time it has been on several occasions in contemplation to publish Mr. (after Sir Joseph) Banks' Journal; but this has never been accomplished.

Cook's Journal was in triplicate. The Admiralty Orders of the day enjoined that the captain should keep a journal of proceedings, a copy of which was to be forwarded to the Admiralty every six months, or as soon after as possible. In the case of this voyage the ship was two and a half years from England before any opportunity of sending this copy occurred. The ship was the whole of this time in new and savage lands. When Batavia was reached the duplicate of Cook's Journal was sent home, and six months later, when the ship arrived in England, the full Journal of the voyage was deposited at the Admiralty.

The Secretary of the Admiralty, Sir Philip Stephens, a personal friend and appreciator of Cook, appears to have appropriated the Batavia duplicate, as we find it in the hands of his descendants, and passing thence by sale, first to Mr. Cosens in 1868, and then in 1890 to Mr. John Corner.

The other and complete copy is still in possession of the Admiralty, though in some unexplained manner it was absent for some years, and was only recovered by the exertions of Mr. W. Blakeney, R.N.

A third copy of the Journal also terminates a few days before reaching Batavia. It is in the possession of Her Majesty the

Queen, and from its appearance was kept for, and probably presented to, George III, who took great interest in the voyage.

Neither private possessors nor the Admiralty have felt moved to publish this interesting document until Mr. Corner acquired his copy, when, being an enthusiastic admirer of Captain Cook, he determined to do so, and was making preliminary arrangements, when he suddenly died, after a few hours' illness. His son, anxious to carry out his father's wishes, which included the devotion of any proceeds to the restoration of Hinderwell Church--the parish church of Staithes, whence Cook ran away to sea--has completed these arrangements, and the present volume is the result.

The text is taken from Mr. Corner's copy so far as it goes, paragraphs from the Admiralty copy, which do not appear in the former, being added, with a notation of their source.

The last portion, from October 23rd, 1770, which is only given in the Admiralty copy, is necessarily taken from it.

The three copies are, practically, identical, except for the period August 13th to 19th, 1770, during which the wording is often different, though the events are the same.

It is not very difficult to account for this.

The two first-mentioned Journals are in the handwriting of an amanuensis, Mr. Orton, the clerk. No autograph journal is, so far as is known, in existence, but some rough original must have been kept, as both copies bear internal evidence of having been written up after the lapse of an interval after the events described.

This is markedly the case in the Australian part of the Journal.

It is known that Botany Bay was at first called by Cook, Stingray Bay, on account of the number of rays caught there; but after Banks had examined his collection, and found all his plants new to science, Cook determined to call it Botany Bay. It is, however, called Botany Bay from the first in the Journals.

The name, "New South Wales," was not bestowed without much consideration, and apparently at one stage New Wales was the appellation fixed upon, for in Mr. Corner's copy it is so called throughout, whereas the Admiralty copy has "New South Wales."

It would therefore seem that about the period of the discrepant accounts Mr. Corner's copy was first made, and that Cook, in the Admiralty copy, which for this part is fuller, revised the wording of his description of this very critical portion of the voyage.

The Queen's Copy has been written with especial care, and by several different hands. It was evidently the last in point of time.

In reading COOK'S JOURNAL of his First Voyage it must be remembered that it was not prepared for publication. Though no doubt the fair copies we possess were revised with the care that characterises the man, and which is evidenced by the interlineations and corrections in his own hand with which the pages are dotted, it may be supposed, from the example we have in the published account of his Second Voyage, which was edited by himself, that further alterations and additions would have been made, to make the story more complete, had he contemplated its being printed.

This does not, however, in any way detract from the interest of a transcript of his record on the spot; and though many circumstances recorded in Hawkesworth, from Banks or others, will not be found, it is probable that an exact copy of the great navigator's own impressions, and the disentanglement of them from the other interpolated matter, will be welcome.

In printing this Journal the only alterations that have been made are the breaking-up into chapters, with modern headings; the addition of punctuation; and in the form of the insertion of the daily record of wind, weather, and position of the ship. These in the original are on the left hand page in log form. To save space they have been placed at the end of every day's transactions.

The eccentricities in the spelling have been preserved. A good many of these would seem to be due to Mr. Orton, the transcriber, as Cook's own letters are generally correct in their orthography. The use of the capital letter was usual at the time.

References will be found to sketches and plans which have not been reproduced.

Cook's knack of finding names for localities was peculiarly happy. Those who have had to do this, know the difficulty. Wherever he was able to ascertain the native name, he adopts it; but in the many cases where this was impossible, he manages to find a descriptive and distinctive appellation for each point, bay, or island.

He seems to have kept these names very much to himself, as it is seldom the officers' logs know anything of them; and original plans, still in existence, in many cases bear different names to those finally pitched upon.

Cook's names have rarely been altered, and New Zealand and Australian places will probably for all time bear those which he bestowed.

In the orthography of his native names he was not so successful. The constant addition of a redundant "o" has altered many native sounds, such as Otaheite for Tahiti, Ohwhyhee for Hawaii; while his spelling generally has been superseded by more simple forms. This is a matter, however, in which great difficulties are found to the present day by Englishmen, whose language presents no certain laws for rendering any given sound into a fixed combination of letters.

Cook's language is unvarnished and plain, as a sailor's should be. His incidents, though often related with circumstance, are without exaggeration; indeed if any fault is to be found, it is that he takes occurrences involving much labour and hardship as such matters of course, that it is not easy for the reader, especially if he be a landsman, to realise what they really entail.

Cook was assiduous in obtaining observations to ascertain the Variation of the compass--i.e., the difference between the direction shown by the magnetic needle and the true north. He is constantly puzzled by the discrepancies in these observations made at short intervals. These arose from the different positions of the ship's head, whereby the iron within a certain distance of the compass is placed in different positions as regards the needle working the compass card, the result being that the needle is attracted from its correct direction in varying degree. This is known as the Deviation of the compass. The cause of this, and of the laws which govern it, were only discovered by Captain Flinders in 1805. Happily for the navigators of those days, little iron entered into the construction of ships, and the

amount of the Deviation was not large, though enough to cause continual disquiet and wonderment.

Cook's longitudes in this voyage are all given as west of Greenwich, not divided into east and west, as is usual at this day. The latter system again has only been adopted universally since his time.

Though Cook himself gives, at the beginning of the Journal, a note of the method of reckoning days adopted, it may not be amiss to give further explanation here.

It was the usual custom on board ships to keep what was known as Ship time--i.e., the day began at noon BEFORE the civil reckoning, in which the day commences at midnight. Thus, while January 1st, as ordinarily reckoned, is from midnight to midnight, in ship time it began at noon on December 31st and ended at noon January 1st, this period being called January 1st. Hence the peculiarity all through the Journal of the p.m. coming before the a.m. It results that any events recorded as occurring in the p.m. of January 1st in the log, would, if translated into the ordinary system, be given as happening in the p.m. of December 31st; while occurrences in the a.m. of January 1st would be equally in the a.m. of January 1st in both systems.

This puzzling mode of keeping the day at sea continued to a late period, and was common to seamen of all nations.

The astronomical day, again, begins at noon AFTER the midnight at which the civil day begins, and hence is a whole day later than the ship's day. This does not enter into Cook's Journal, but one of the logs of the Endeavour, extant, that of Mr. Green the astronomer, was kept in this time, and the events of say Thursday, June 24th, of Cook's Journal, are therein given as happening on Wednesday, June 23rd. These

differences of reckoning have been a fertile source of confusion in dates in many voyages.

Besides Cook's Journals there are other Journals and Logs of the voyage extant. Perhaps it may be necessary to state that a Log is the official document in which the progress of the ship from hour to hour is recorded, with such official notes as the alteration in sail carried, expenditure of provisions and stores, etc. A Journal contains this information in a condensed form, with such observations as the officer keeping it may feel inclined to insert.

The ship's Log Book of the Endeavour is in the British Museum. Mr. R.M. Hudson of Sunderland possesses Cook's own log, not autograph however, presented by Cook to Sir Hugh Palliser, the ancestor of his wife.

The Journals of all the officers of the Endeavour are preserved at the Public Record Office. There is, however, nothing to be got out of them, as they are mainly copies one of the other, founded on the ship's log.

The portion of Mr. Molineux's, the Master's, Log that exists (at the Admiralty) is a most beautifully kept and written document, enriched with charts and sketches that attest the accuracy of Cook's remark, that he was a "young man of good parts."

The log kept by Mr. Green, however, does contain a few original remarks, some of which have been made use of. This book contains a mass of astronomical observations, and witnesses to the zeal of this gentleman in his especial duty.

He records in one place, when far away from land, his disgust that the officers were unwilling to aid him in lunar observations. No doubt they saw no particular use in them

when there was no coast to fix; but there is ample proof that he received every aid when Cook thought it necessary.

Sufficient charts have been placed in this book to enable the reader to follow the more interesting parts of the voyage; some being reproductions of Cook's own charts, others modern publications. In the case of the coast of East Australia, the coast-line as laid down by Cook, and as now known, are given side by side for comparison.

It must be understood, that although this book is styled CAPTAIN COOK'S JOURNAL, he was on this voyage only a Lieutenant in Command, and therefore only Captain by courtesy.

W.J.L. WHARTON.

FLORYS, WIMBLEDON PARK,

April 7th, 1893.

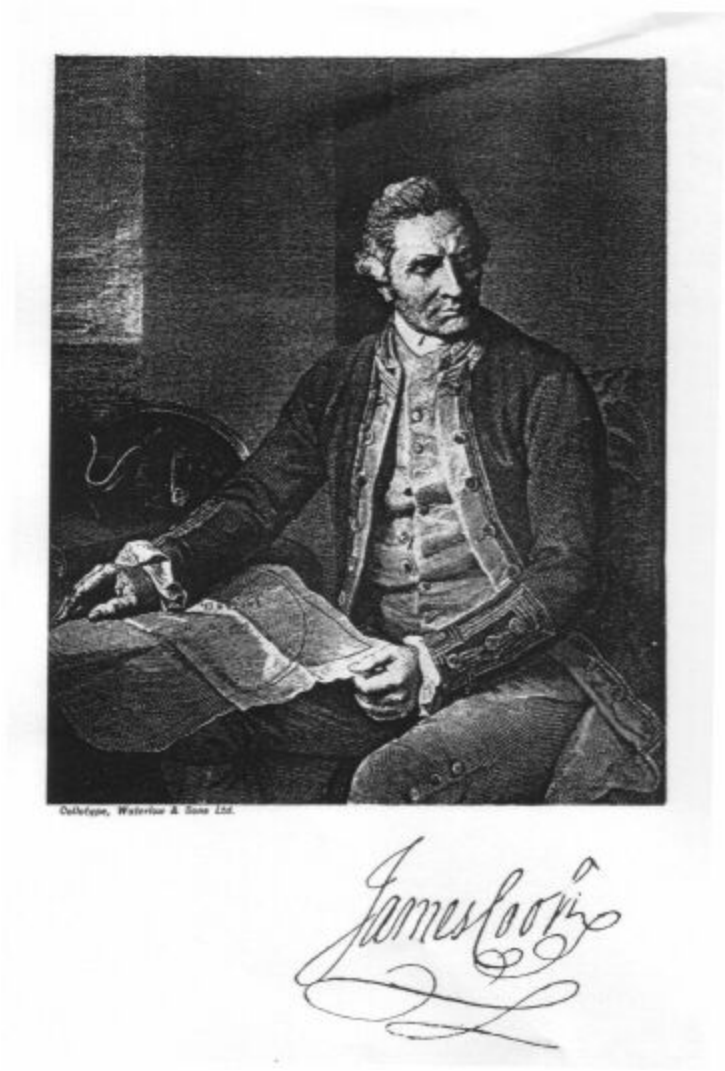

PLATE: PORTRAIT OF CAPTAIN JAMES COOK WITH A FACSIMILE OF HIS SIGNATURE.
Collotype, Waterlow & Sons Ltd.

ILLUSTRATIONS.

1. PORTRAIT OF CAPTAIN JAMES COOK WITH A FACSIMILE OF HIS SIGNATURE. COLLOTYPE, WATERLOW & SONS LTD.

2. MODERN CHART OF SOUTH PACIFIC OCEAN SHOWING TRACK OF H.M.S. ENDEAVOUR, 1769 TO 1770.

3. FACSIMILE OF SATURDAY, 3RD JUNE, 1769.

4. CHART OF THE ISLAND OTAHEITE, BY LIEUTENANT JAMES COOK, 1769.
REPRODUCTION OF THE ORIGINAL PUBLISHED CHART.

5. TAHITI: TYPES OF CANOES.

6. CHART OF THE SOCIETY ISLES, DISCOVERED BY LIEUTENANT JAMES COOK, 1769. REPRODUCTION OF THE ORIGINAL PUBLISHED CHART.

7. WAR CANOE OF NEW ZEALAND.

8. TRACK OF ENDEAVOUR FROM TORRES STRAIT TO JAVA. AUGUST AND SEPTEMBER 1770.

9. FACSIMILE OF TUESDAY, 23RD OCTOBER, 1770.

SKETCH OF CAPTAIN COOK'S LIFE.

CAPTAIN COOK'S life, or the account of so much of it as is recoverable, has been so often recounted that there is no occasion to insert more in this publication than is necessary as a reference to the reader, to enable him to realise the career and character of the man.

Cook's first biographer, Andrew Kippis, wrote in 1788, and his work has recently been republished.* (* "A Narrative of the Voyage round the World, performed by Captain James Cook, with an Account of His Life" by A. Kippis, D.D., F.R.S. London: Bickers & Son 1889.)

The latest and best life is by Walter Besant,* (* "Captain Cook" by Walter Besant: "English Men of Action" London, Macmillan & Co. 1890.) whose graceful pen has given us a fascinating, interesting, and, as far as is possible, complete picture of this great Englishman. Many details of Cook's private life are lost, but enough has been collected by Mr. Besant to place our hero vividly before us, and a perusal of his work is strongly recommended.

Many things in the following sketch are taken from Mr. Besant, to whom I wish to tender my acknowledgments.

James Cook rose from nearly the lowest ranks. The second son of James Cook, a Yorkshire labourer, and Grace his wife, he was born on the edge of the Cleveland Hills on February 27th, 1728, in the little village of Marton, which lies about four miles south-south-east of Middlesborough, and five miles west of the well-known hill and landmark, Roseberry Topping. Eight years later his father removed to Great Ayton, which lies close under Roseberry Topping.

At the age of thirteen Cook, who, it is recorded, had had some elementary schooling both at Marton and Great Ayton, was apprenticed to one Sanderson, a draper and grocer of Staithes, a fishing village on the coast, about fourteen miles from Ayton and nine north-west of Whitby.

A year later Cook went, or ran away, to sea, shipping at Whitby on board the Freelove, a collier belonging to the brothers Walker.

In this hard school Cook learnt his sailor duties. No better training could have been found for his future responsibilities. Here he learnt to endure the utmost rigours of the sea. Constant fighting with North Sea gales, bad food, and cramped accommodation, taught him to regard with the indifference that afterwards distinguished him, all the hardships that he had to encounter, and led him to endure and persevere where others, less determined or more easily daunted by difficulties, would have hurried on, and left their work incomplete.

All details of Cook's life during his thirteen years in the merchant service are lost: what voyages he made, how he fared, whether he advanced in general knowledge, all is gone. The only fact known is that in May 1755, when Cook was twenty-seven years of age, and mate of a vessel of Messrs. Walker, then in the Thames, he, to avoid the press, then active on account of the outbreak of the war with France, volunteered on board H.M.S. Eagle, of 60 guns, as an able seaman.

Captain Hugh Palliser, who succeeded to the command of this ship in October, was certainly Cook's warmest patron, and it would appear that Cook did work superior to that of an able seaman in the Eagle. Be that as it may, all that is absolutely known is that that ship took her share of the

fighting at the taking of Louisbourg and elsewhere on the North American and West Indian Station, and returned to England in 1759.

By Palliser's interest Cook was now appointed master of the Mercury. It is therefore evident that his qualifications as a navigator recommended themselves to Palliser.

The Mercury went to North America, and here Cook did his first good service recorded, namely, taking soundings in the St. Lawrence, to enable the fleet then attacking Quebec to take up safe positions in covering the army under Wolfe. This he accomplished with great skill, under many difficulties, in the face of the enemy, much of it being done at night. He was immediately employed in making a survey of the intricate channels of the river below Quebec, and for many years his chart was the guide for navigation. Cook was indeed a born surveyor. Before his day charts were of the crudest description, and he must have somehow acquired a considerable knowledge of trigonometry, and possessed an intuitive faculty for practically applying it, to enable him to originate, as it may truly be said he did, the art of modern marine surveying.

The expedition to Quebec concluded, Cook was appointed master of the Northumberland, bearing Admiral Lord Colville's flag, and during that ship's winter at Halifax he applied himself to further study of mathematics and astronomy.

In 1762, the Northumberland being at Newfoundland during the capture of that island from the French, Cook again was employed in surveys. This attracted the attention of Captain Graves, the Governor, who conceived a high opinion of his abilities in this respect.

In the latter part of 1762 Cook returned to England and married Elizabeth Batts, daughter of a man in business at Wapping; but a few months afterwards he was called upon by Captain Graves to go again to Newfoundland to make marine surveys.

In this important work he was engaged until 1767, Captain Palliser, who succeeded Captain Graves as Governor, being only too glad to avail himself of Cook's services.

The charts he made during these years in the schooner Grenville were admirable. The best proof of their excellence is that they are not yet wholly superseded by the more detailed surveys of modern times. Like all first surveys of a practically unknown shore, and especially when that shore abounds in rocks and shoals, and is much indented with bays and creeks, they are imperfect, in the sense of having many omissions; but when the amount of the ground covered, and the impediments of fogs and bad weather on that coast is considered, and that Cook had at the most only one assistant, their accuracy is truly astonishing. The originals of these surveys form part of the most precious possessions of the Hydrographic Office of the Admiralty.

We now approach the crowning achievements of Cook's life.

After many years' neglect the exploration of the Pacific was awaking interest. This great ocean, which very few, even to this day, realise occupies nearly one half of the surface of the globe, had been, since the first voyage of Magellan, crossed by many a vessel.

Notwithstanding, very little was known of the islands occupying its central portion.

For this there were two reasons. First, the comparatively small area covered by islands; secondly, the fact that nearly

all who traversed it had followed Magellan's track, or, if they started, as many did, from Central America, they made straight for Magellan's discovery, the Ladrone Islands. For this, again, there was a reason.

Few sailed for the purpose of exploration pure and simple; and even those who started with that view found, when embarked on that vast expanse, that prudence dictated that they should have a moderate certainty of, by a certain time, falling in with a place of sure refreshment. The provisions they carried were bad at starting, and by the time they had fought their way through the Straits of Magellan were already worse; water was limited, and would not hold out more than a given number of days. Every voyage that is pursued tells the same story--short of water, and eagerly looking out for an opportunity of replenishing it. The winds were found to blow in fixed directions, and each voyager was fearful of deviating from the track on which it was known they would be fair, for fear of delays. And ever present in each captain's mind was the dread of the terrible scourge, scurvy. Every expedition suffered from it. Each hoped they would be exempt, and each in turn was reduced to impotence from its effects.

It was the great consideration for every leader of a protracted expedition, How can I obviate this paralyzing influence? And one after another had to confess his failure.

It is yearly becoming more difficult for us to realise these obstacles.

The prevailing winds and currents in each part of the ocean are well known to us: the exact distance and bearing from one point to another are laid down in the chart; steam bridges over calm areas, and in many cases conducts us on our entire journey at a speed but little inferior to that of land

travelling by railroad; modern science preserves fresh and palatable food for an indefinite period; and, in a word, all the difficulties and most of the dangers of long voyages have disappeared.

Take one element alone in long voyages--the time required. The average progress of a ship in the eighteenth century was not more than fifty miles a day. Nowadays we may expect as much as four hundred miles in a full powered steamer, and not less than one hundred and fifty in a well-fitted sailing ship.

But navigation, and more especially the navigation of the unknown Pacific, was very different in Cook's days, when all the obstacles above mentioned impeded the explorers, and impelled them to follow a common track.

There were a few who had deviated from the common track.

The Spaniards, Mendana, Quiros, Torres, in the latter part of the sixteenth century, starting first from their colonies in Peru, had ventured along the central line of the Pacific, discovering the Marquesas, certain small coral islands, the Northern New Hebrides, and the Solomon Islands; but their voyages, mainly for fear of Drake and his successors, were kept so secret that no one quite knew where these islands lay.

Abel Tasman, in 1642, coming across the Indian Ocean from the westward, had touched at Tasmania, or, as he called it, Van Diemen's Land, had skirted the western coast of the north island of New Zealand without landing, and had stretched away to the north-east, and found the Tonga Group.

The English Buccaneers were not among these discoverers; Dampier, Woods Rogers, and others, all went from Acapulco

to the Ladrones, looking out for the valuable Spanish galleons from Manila, and they added little or nothing to the knowledge of the Pacific and what it contained.

It was not therefore strange that the imagination of geographers ran riot amongst the great unknown areas. They were impressed, as they looked at the globes of the day, with the fact that, while the northern hemisphere contained much land, the southern showed either water or blank spaces; and starting with the ill-founded idea that the solid land in either hemisphere should balance, they conceived that there must be a great unknown continent in the southern part of the Pacific to make up the deficiency. This was generally designated Terra Australis Incognita, and many is the ancient chart that shows it, sketched with a free and uncontrolled hand, around the South Pole. It was held by many that Tasman had touched it in New Zealand; that Quiros had seen it near his island of Encarnacion, and again at Espiritu Santo (New Hebrides), but no one had been to see.

In George III's reign the desire to know more of this unknown ocean arose in England. The king himself took great interest in it, and for the first time since Queen Elizabeth's age, when Davis, Frobisher, Drake, Narborough, and others, had gone on voyages of discovery, the pursuit was renewed.

In 1764 the Dolphin and Tamor, under the command of Commodore Byron and Captain Mouat, sailed on a voyage round the world. They spent some time, as ordered, in exploring the Falkland Islands, and, after a two months' passage through Magellan Strait, they stood across the Pacific. They, however, also followed near the well-beaten track, and passing north of the Paumotus, of which they sighted a few small islands, they too made for the Ladrones.

As usual, they suffered much from scurvy, and the one idea was to get to a known place to recover. Byron returned in May 1766, having added but little to the knowledge of the Pacific, and the Dolphin was again sent in the August of the same year, with the Swallow, under the command of Captains Wallis and Carteret, on a similar voyage.

They did somewhat better. After the usual struggle through the long and narrow Strait of Magellan, against the strong and contrary winds that continually blow, and which occupied four months, they got into the Pacific.

As they passed out they separated, the Dolphin outsailing the Swallow, and a dispassionate reader cannot well escape the conclusion that the senior officers unnecessarily parted company.

The Dolphin kept a little south of the usual route, fell in with some of the Paumotu Group, and finally discovered Tahiti, where she anchored at Royal Bay, after grounding on a reef at its entrance, with her people, as usual, decimated by scurvy. They were almost immediately attacked by the natives, who, however, received such a reception that they speedily made friends, and fast friends too. The remainder of the month of the Dolphin stay was marked with the most friendly intercourse, and she sailed with a high opinion of Tahiti and the Tahitians; the Queen, Cook's Obereia, being especially well disposed to them. Their communication with the natives must, however, have been limited, as they remained too short a time to learn the language, and we gather little of the manners and customs from the account of the voyage.

After sailing from Tahiti we hear the same tale--sickness, want of water, doubt of what was before them. After sailing by several small islands, and an attempt to water at one,

course was steered as before for the Ladrones. Let Wallis tell his own story. He says:--

"I considered that watering here would be tedious and attended with great fatigue; that it was now the depth of winter in the southern hemisphere; that the ship was leaky, that the rudder shook in the stern very much, and that what other damage she might have received in her bottom could not be known. That for these reasons she was very unfit for the bad weather which she would certainly meet with, either in going round Cape Horn or through the Streight of Magellan; that if she should get safely through the streight or round the Cape, it would be absolutely necessary to refresh in some port; but in that case no port would be in her reach. I therefore determined to make the best of my way to Tinian, Batavia, and so to Europe by the Cape of Good Hope.

"By this rout, as far as we could judge, we should sooner be at home; and if the ship should prove not to be in a condition to make the whole voyage, we should still save our lives, as from this place to Batavia we should probably have a calm sea, and be not far from a port."

These are scarcely the sentiments of a bold explorer, and we shall look in vain for any similar ideas on the part of Cook. Here was a ship just a year from England, just come from a convenient and friendly island, where every refreshment and opportunity for refit were to be found, and the only thought is how to get home again!

It was the vastly different conduct of Cook's voyages; the determination that nothing should stop the main object of the expedition; his resource in every difficulty and danger; that caused, and rightly caused, him to be hailed as a born leader of such expeditions.

Wallis followed nearly on Byron's track: went from the Ladrones, through the China Sea, to Batavia, and so home, arriving in May 1768.

The Swallow, under Captain Carteret, was navigated in a different spirit. She was badly fitted out for such a voyage, had not even a forge, and all the articles for trade were on board the Dolphin. But Carteret was not easily daunted. He might, under the circumstances, when he found himself alone, have abandoned the voyage; but he boldly went forward. Passing from the Strait of Magellan, he touched at Juan Fernandez, and steering somewhat south of Wallis's line, he passed south of Tahiti, discovering Pitcairn's Island on his way, and some of the islands south of the Paumotus.

By this time his people were severely afflicted with scurvy, and his ship in a bad state; but Carteret only thought of getting to some place of refreshment, from which he might afterwards pass on his voyage towards the south, in the hope of falling in with the great southern Continent.

In this he was not fortunate. Missing all other islands, he fell across the Santa Cruz Group, and hoping that he had found what he wanted, he anchored and tried to water. The party were, however, attacked by the natives, and several, including the master, were wounded and died by poisoned arrows. All hope of a quiet refit was over, and his ship's company being in a wretched condition, no forge or tools on board to enable him to effect his many repairs, Carteret, who was himself very ill, was obliged to give up all intention of exploration to the southward. He got enough water to last him, and sailed on toward the Solomon Islands. These he also just missed, but fell in with New Britain, and passing between it and New Ireland, demonstrated for the first time that these two large islands were not one, as had been supposed. He here managed to do something to repair his

leaky vessel, heeling and caulking her, but got little but fruit for his scurvy-stricken crew. He was attacked by the fierce islanders, and was altogether unable to do as much as he evidently earnestly desired towards examining the islands.

Thence they struggled on by Mindanao to Makassar in Celebes, delayed by contrary winds, disappointed of refreshments at every place they tried, and losing men from scurvy. At Makassar they met with but an inhospitable reception from the Dutch, who refused to permit them to receive refreshments there, and after waiting at Bonthain, a place in Celebes, several months, for the monsoon to change, they at last arrived at Batavia, the only port in the Dutch Indies really open to ships, in June 1768. Thence, after heaving down and a thorough repair, they reached home, via the Cape, on March 20th, 1769.

Of all the voyages before Cook's, Carteret's showed most determination and true spirit of enterprise; and had his ship been better supplied, and more suited to the exigencies of such a long cruise, he would, but for one thing, have accomplished far more. This was the fatal disease, which no captain had as yet succeeded in warding off, and which hampered and defeated the efforts of the most enthusiastic. No man could go beyond a certain point in disregarding the health of his crew.

These, then, were the kind of voyages, with their scanty fruits, to which the English people were getting accustomed, and they were not such as to encourage repetition.

In all the years that had elapsed since the Spaniards first sailed on the Pacific, but little real knowledge of the lands in it had been gained.

Let us attempt to give a picture of what was known.

The Marquesas and Santa Cruz Group were known to exist; but of the Solomons grave doubts were felt, as no man had seen them but Mendana, and they were, if placed on a map at all, shown in very different longitudes.

Several voyagers had sighted different members of the extensive Paumotu Group, but the varying positions caused great confusion.

Tahiti had been found by Wallis.

Tasman had laid down the south point of Tasmania, the western coast of the North Island of New Zealand, and the Tonga Islands. Dampier and Carteret had shown that New Britain and New Ireland were separate islands, lying north-east of New Guinea. Quiros had found the northern island of the New Hebrides.

But of none of these lands was anything really known. Those who had visited them had merely touched. In no case had they gone round them, or ascertained their limits, and their descriptions, founded on brief experience, were bald and much exaggerated.

Let us turn to what was unknown.

This comprises the whole of the east coast of Australia, or New Holland, and whether it was joined to Tasmania on the south, and New Guinea to the north; the dimensions of New Zealand; New Caledonia and the New Hebrides, with the exception of the fact that the northern island of the latter existed; the Fiji Islands; Sandwich Islands; the Phoenix, Union, Ellice, Gilbert, and Marshall Groups, with innumerable small islands scattered here and there; the Cook Islands, and all the Society Islands except Tahiti. The majority of the Paumotu Group. The coast of North America north of 45

degrees north was unknown, and there was the great, undefined, and imaginary southern Continent to disprove.

Whether other voyages of exploration would have been undertaken one cannot say; but in 1768 the Royal Society put in a word.

A transit of Venus over the sun's disc was to occur in 1769, and astronomers were anxious to take advantage of it, the object of the observation being to ascertain the distance of the earth from the sun, the fundamental base line in all astronomical measurements, and which was very imperfectly known.

The Central Pacific afforded a favourable position, and the Royal Society memorialised the king to send a ship for the purpose. The request was granted, and at first Alexander Dalrymple, who had conducted marine surveys in the East Indies, and was known as a scientific geographer, was selected as observer. As, however, it was found that he also expected to command the ship, the Admiralty positively refused to have anything to do with him, and after some discussion James Cook was selected.

This says volumes for Cook's reputation at the time. To have risen absolutely from the ranks was a great deal, but to be chosen as a master, to command a ship, and undertake a scientific observation of this importance, was a most exceptional occurrence, and speaks well for the judgment of those who had the selection.

It seems that Mr. Stephens, the Secretary to the Admiralty, had much to do with it. How Stephens had become acquainted with Cook history does not relate, but doubtless his personal visits to the Admiralty in connection with the completion of his charts of Newfoundland, from which he

returned every winter, had brought him into contact with the Secretary, who had clearly formed a high opinion of him.

Cook, we may be sure, jumped at the chance, and his pride must have been great when he found he was to receive a commission as Lieutenant.

This in itself was a most unusual step. The occasions on which a master had been transferred to the executive line of the Royal Navy were very rare, and many an admiral used his influence in favour of some deserving officer in vain.

This was not without good reason, as the whole training of the Master of those days was unfavourable to success in command of ships or men. The exception was, however, in this case amply justified.

Cook was allowed to choose his vessel, and bearing in mind the dangers of grounding in unknown seas, he pitched upon his old friends, the stoutly-built, full-bottomed colliers of the North Sea trade.

His ship, the Endeavour, was a Whitby built vessel of three hundred and seventy tons, and was known as H.M. Bark Endeavour, there being another vessel, a cutter, of the same name in the Royal Navy. She was brought to the dockyard at Deptford to fit out. Her appearance was, of course, wholly different from that of a vessel built as a man-of-war, and we shall see that this caused trouble at Rio Janeiro, where the combination of merchant build and officers in uniform in an armed ship, aroused suspicions in the mind of the Portuguese Viceroy.

It is nowhere directly stated whether the Endeavour was sheathed with copper or not; but as Cook in the account of his second voyage expresses himself as adverse to this method of protecting ships' bottoms, and the operation is

recorded of heeling and boot topping, which was cleaning and greasing the part of the ship just below waterline, it may be concluded that her sheathing was wood.

She proved a most suitable vessel. The log states she was a little crank, but an admirable sea-boat. Her rate of sailing was of course, with her build, slow, but her strength and flat bottom stood her in good stead when she made acquaintance with a coral reef.

She mounted ten small carriage guns and twelve swivels.

Mr. Banks, a scientific botanist, afterwards well known as Sir Joseph Banks, and for a long time President of the Royal Society, a gentleman of private means, volunteered to accompany Cook, and took with him a staff of his own, of artists and others.

He also induced Dr. Solander, a Swedish naturalist, afterwards attached to the British Museum, to accompany him.

Mr. Charles Green, one of the assistants at the Royal Observatory at Greenwich, was sent as astronomer.

This scientific staff added much to the success of the expedition.

Banks and Solander, both men of observation, were able to collect specimens of natural history, and study the manners and customs of the natives with whom they came in contact, which neither the time at Cook's disposal nor his training enabled him to undertake; and though the Journal of the former has never yet been published, and cannot at the present time be traced, many interesting remarks were extracted by Dr. Hawkesworth from it and went far to make his account of the voyage complete.

Mr. Green also demands special notice.

One great question of the day amongst seamen and geographers was the discovering of some ready and sure method of ascertaining the longitude. Half the value of the explorations made up to this time had been lost from this want. The recognised means of finding longitude was by the observation of lunars; that is, accurately measuring the angular distance between the centres of the moon and of the sun, or of the moon and some star.

The motion of the moon is so rapid that this angular distance changes from second to second, and thereby, by previous astronomical calculation, the time at Greenwich at which its distance from any body is a certain number of degrees can be ascertained and recorded.

By well-known calculations the local time at any spot can be obtained, and when this is ascertained, at the precise moment that the angular distance of sun and moon is observed, the difference gives the longitude.

This seems simple enough, but there is a good deal of calculation to go through before the result is reached, and neither the observation nor the calculation is easy, especially with the astronomical tables of those days, and there were very few sailors who were capable of, or patient enough to make them, nor was the result, as a rule, very accurate. For one thing, the motions of the moon, which are extremely complicated, were not enough known to allow her calculated position in the heavens to be very accurate, and a very small error in this position considerably affects the time, and therefore the longitude.

Luckily for Cook, the Nautical Almanac had just been started, and contained tables of the moon which had not

previously been available, and which much lightened the calculations.

The great invention of the chronometer, that is, a watch that can be trusted to keep a steady rate for long periods, was at this time completed by Harrison; but very few had been manufactured, and astronomers and sailors were slow to believe in the efficacy of this method of carrying time about with a ship. Thus Cook had no chronometer supplied to him.

Green had accompanied Mr. Maskelyne, afterwards Astronomer Royal, to Barbados in 1763 in H.M.S. Princess Louisa, in order to test Harrison's timekeeper, and also a complicated chair, from which it was supposed observations of Jupiter's satellites could be observed on board ship; and as this trial afforded the final triumph of the new method, one would have thought that on a voyage of circumnavigation he would have made every effort to get one of these watches.

Be this as it may, the Endeavour had no chronometer, and lunars were the mainstay of the expedition.

In these observations Green was indefatigable. Cook, an excellent observer himself frequently took part in them; but it was Green's especial business, and no doubt to him is due the major part of the determinations of accurate longitude, which is one of the very remarkable points of this voyage.

Green's log, which is extant, is filled with lunar observations, and the extraordinary coincidence between different observations attests the care with which they were made. I dwell upon this because, while full of admiration for Cook's knowledge, and his untiring zeal in every detail of his expedition, it is evident, from a study of the original documents, that without Green many opportunities of