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THE SEA

AND HER

FAMOUS SAILORS.

A HISTORY OF MARITIME ADVENTURE AND EXPLORATION FROM THE CHRISTIAN ERA TO THE PRESENT TIME.

ILLUSTRATIONS.

Portraits—Columbus, Vasco da Gama, Magellan, Anson, Drake, Lapérouse, and Cook.	PAGE							
The Doge of Venice wedding the Adriatic, .								
Ponce de Leon in Search of the Fountain of Youth,	99							
BALBOA TAKING POSSESSION OF THE PACIFIC OCEAN,	105							
A Midnight Panic—the Fire-Ships and the Invincible Armada,	145							
Anson's Adventure on the Happy Island,	199							
BYRON'S CREW ATTACKED BY SAVAGES,	206							
STONES A MATCH FOR MUSKETS-LAPÉROUSE AND THE NATIVES OF NAVIGATOR'S ISLES,	240							



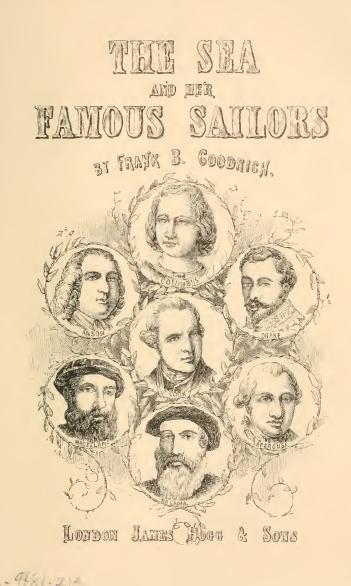
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PRESENTED BY PROF.CHARLES A.KOFOID AND MRS. PRUDENCE W. KOFOID



PONCE DE LEON IN SEARCH OF THE FOUNTAIN OF YOUTH.

He had heard, from the Indians, of an island where, they asserted, was a spring whose waters had the virtue of restoring youth to the aged, and vigour to the decrepit. Ponce thought this fountain would be an inexhaus table source of revenue to him, as he could levy a tax upon all who derived benefit from its influence. Wherever he stopped he drank of all the running streams and standing pools, whether their waters were fresh or stagmant, tait he might not miss the famous spring.—PAGE 90.



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G63

CONTENTS.

					PAGE
PREFACE, .					. 11
INTRODUCTION,					13

SECTION I.

FROM THE COMMENCEMENT OF THE CHRISTIAN ERA TO THE APPLI-CATION OF THE MAGNETIC NEEDLE TO EUROPEAN NAVIGATION, A.D. 1300.

CHAPTER II.—The Travels of Marco Polo—The First Mention of Japan in History—Kublai Khan.—Marco Polo's Voyage from Amoy to Ornuz— Malacca—Sumatra—Pigmies—Singular Story of Diamonds—The Rocc— Polo not recognised upon his Return—His Imprisonment—The Publication of his Narrative—The First Mention of the Loadstone in History—Its Early Names—The First Mention of its Directive Power—Friar Bacon's Magnet—The Loadstone in Arabia—An Eye-witness of its Efficiency in the Syrian Waters in the year 1240—The Magnet in China—Early Mention of it in Chinese Works—The Variation noticed in the Twelfth Century—Other Discoveries made by the Chinese—Flavio Giaia—The Arms of Amalfi—All Records Lost of the First Voyage made with the Compass by a European Ship,



28

SECTION II.

FROM THE APPLICATION OF THE MAGNETIC NEEDLE TO EUROPEAN NAVIGATION TO THE FIRST YOYAGE ROUND THE WORLD UNDER MAGELLAN, 1300-1519.

CHAPTER III.—The Portuguese on the Coast of Africa—The Spaniards and the Canary Isles—Don Henry of Portugal—The Terrible Cape, now Cape Bojador—Discovery of the Madeiras—A prolific Rabbit—A fearful Scene —A Seven Years' Conflagration—Hostility of the Portuguese to further Maritime Adventure—The Bay of Horses—The first Gold-Dust seen in Europe—Discovery of Cape Yerd and the Azores—The Europeans approach the Equator—Journey of Cada-Mosto—Death of Don Henry—The Portuguese cross the Equator from Guinea to Congo—John II. conceives the idea of a Route by Sea to the Indies—His Artifices to prevent the Interference of other Nations—The Overland Journey of Covillam to India—The Voyage of Bartholomew Diaz—The Doubling of the Temendous Cape—Its Baptism by the King—Injurious Effects of Success upon Portuguese Ambition,

39

CHAPTER IV .- Birth of Christopher Columbus-His early Life and Education-His First Voyage-His Marriage-His maritime Contemplations-He makes Proposals to the Senate of Genoa, the Court of Venice, and the King of Portugal-The Duplicity of the latter-Columbus visits Spain-Juan de Marchena-Columbus repairs to Cordova-His second Marriage -His Letter to the King-The Junto of Salamanca-Columbus resolves to shake the dust of Spain from his feet-Marchena's Letter to Isabella-The Queen gives audience to Columbus-The Conditions stipulated by the latter-Isabella accepts the Enterprise, while Ferdinand remains aloof -The Port of Palos-The Superstition of its Mariners-The hand of Satan -A Bird which lifted Vessels to the Clouds-The Pinta and the Nina-The Santa Maria-The three Pinzons-The Departure-Columbus' Journal-The Helm of the Pinta unshipped-The Variation of the Needle-The Appearance of the Tropical Atlantic-Floating Vegetation-Trade-Winds-Alarm and threatened Mutiny of the Sailors-Perplexities of Columbus-Land ! Land ! a False Alarm-Indications of the Vicinity of Land-Murmurs of the Crews-Open Revolt quelled by Columbus-Floating Reeds and Tufts of Grass-Land at last-The Vessels anchor overnight-Discovery of Guanahani-Ceremonies of taking Possession-Exploration of the neighbouring Islands-Search for Gold-Cuba supposed by Columbus to be Japan-The Cannibals-Haiti-Return homewards-A Storm-Arrival at the Azores-Conduct of the Portuguese-Columbus at Lisbon-At Palos-At Barcelona-Columbus' Second Voyage-Discovery of Guadeloupe, Antigoa, Santa Cruz, Jamaica-Illness of Columbus-Terrible Battle between the Spaniards and the Savages-Columbus returns to Spain-His Reception by the Queen-His Third Voyage-The Region of Calms-Discovery of Trinidad and of the Main Land-Assumption and Margarita-Columbus in Chains-The Failing Health of Columbus-His Fourth Voyage-Martinique, Porto Rico, Nicaragua,

PAGE

Costa Rica, Panama—His Search for a Channel across the Isthmus—He predicts an Eclipse of the Moon at Jamaica—His Return—The Death of Isabella—Columbus penniless at Valladolid—His Death—His four Burials —The Injustice of the World towards Columbus—Amerigo Vespucci—The New World namcd America—John Cabot in Labrador—Sebastian Cabot in Hudson's Bay—Vincent Yanez Pinzon at the mouths of the Amazon,

CHAPTER V .- Portuguese Navigation under Emmanuel-Popular Prejudices -Vasco da Gama-Preparations for an Indian Voyage-The Departure-Rendezvous at the Cape Verds-Landing upon the Coast-The Natives-An Invitation to Dinner, and its Consequences-A Storm-Mutiny-The Spectre of the Cape-Da Gama and the Negroes-Adventure with an Albatross-The Hottentots and Caffres-The River of Good Promise-Mozambique-Treachery of the Natives-Mombassa, and its roguish King -Melinda-Festivities-The Malabar Coast-Calicut-The Route to the Indies discovered-The Moors in Hindostan-Condition of the Country upon the Arrival of Da Gama-Hostility of the Moors-They prejudice the King of Calicut against the Portuguese-Consequent Hostilities-A laconic Epistle-Da Gama sets out upon his Return-Wild Cinnamon-A Moorish Pirate disguised as an Italian Christian-A tempestuous Voyage -Wreck of the San Rafael-Honours and Titles bestowed upon Da Gama -An Expedition fitted out under Alvarez Cabral-Accidental Discovery of Brazil-Comets and Waterspouts-Loss of four Vessels-First European Establishment in the East Indies-A Bazaar established at Calicut-Attack by the Moors-Cabral withdraws to Cochin-Visits Cananor and takes in a Load of Cinnamon-Is received with coldness upon his return -Vasco da Gama recalled into the Service by the King-His achievements at Sofala, Cananor, and Calicut-He hangs fifty Indians at the yard-arm -Protects Cochin and threatens Calicut-Withdraws to Private Life-Spread of the Portuguese East Indian Empire-Alphonzo d'Albuquerque -Immense Sacrifice of Life-Ancient Route of the Spice-Trade with Europe-Commerce by Caravans-Revolution produced by Opening the new Route-Francesco Almeida-Discovery of Ceylon-Tristan d'Acunha -The Portuguese Mars-His views of Empire-An arsenal established at Goa-Reduction of Malacca-Siam and Sumatra send embassies to Albuquerque-The Island of Ormuz-Death of Albuquerque-Extent of the Portuguese Dominion-Ormuz becomes the great Emporium of the East-Fall of the Portuguese Empire,

CHAPTER VI.—Ponce de Leon—The Fountain of Youth—Discovery of Florida—The Martyrs and the Tortugas—The Bahama Channel.—Vasco Nuñez de Balboa—He goes to Sea in a Barrel—Marries a Lady of the Isthmus—His Search for Gold—Hears of a mighty Ocean—Undertakes to reach it—Preparations for the Expedition—Leoncico the Blood-hound —Battle with a Cacique—Six hundred Natives killed—Ascent of the Mountains—Balboa mounts to the Summit alone—The first sight of the Pacific—Ceremonies of taking Possession—Balboa up to his knees in the Ocean—Every one tastes the Water—A Voyage upon the Pacific, and a narrow Escape—Ignominious Fate of Balboa—Juan Diaz de Solis—Disoovers the Rio de la Plata—His horrible Death by Cannibals—A Papal Eull—Ferdinand Magellan—He offers his services to Spain—His plans—

50

78

His Fleet-Pigafetta the Historian-An inauspicious Start-Teneriffe and its Legends-St. Elmo's Fire-The Crew make famous Bargains with the Cannibals-Heavy price paid for the King of Spades-Patagonian Giants -Pigafetta's Exaggerations-The Healing Art in Patagonia-The Tragedy of Port Julian-Discovery of a Strait-The Open Sea-Cape Deseado-The Ocean named Pacific-Ravages of the Scurvy-A Patagonian Convert -The Needle becomes Lethargic-Discovery of the Ladrones-Discovery of the Philippines-The King of Zubu wishes the King of Spain to pay Tribute-He finally abandons the idea-Magellan invades a refractory Island-His Death-Attempts to recover his Body-Serranc left to his Fate-The Ships arrive at Borneo-The Sailors drink too freely of arrack -Festivities and Treachery-The Fleet arrives at the Moluccas-The King of Tidore-A Brisk Trade in Cloves-The Spice-Tariff-The Vittoria sails homeward-Arrival at the Cape Verds-Loss of One Day-Completion of the First Voyage of Circumnavigation. .

SECTION III.

FROM THE FIRST VOYAGE ROUND THE WORLD TO THE DISCOVERY OF CAPE HORN, 1519-1616.

CHAPTER VII .- Voyage of Jacques Cartier-Maritime Projects of Francis I. of France-Gulf of St. Lawrence-A quick Trip home-Second Voyage -Canada, Quebec, Montreal-A captive King-Voyage of Sir Hugh Willoughby and Richard Chancellor-Discovery of Nova Zembla-Disastrous Winter-Fate of the Expedition-Martin Frobisher-His Voyage in quest of a North-west Passage-Greenland-Labrador-Frobisher's Straits-Supposed Discovery of Gold-Second Voyage-A cargo of precious earth taken on Board-Meta Incognita-Third Voyage-A mortifying Conclusion-The Struggle for Supremacy-Sir John Hawkins-Francis Drake -His first Voyage to the Spanish Main-Commission granted by Queen Elizabeth-Expedition against the Spanish Possessions-Exploits at Mogador and Santiago-Crossing the Line-A Raft-Arrival in Patagonia -Trial and Execution of Doughty-Passage through Magellan's Strait-Adventures of William Pitcher and Seven Men-Cape Horn-Arrival at Valparaiso-A rich Prize-A Spaniard caught napping-Drake's achievements at Callao-Battle with a Treasure-Ship-Drake gives a receipt for her cargo-His Plans for returning Home-Fresh Captures-Performances at Guatulco and Acapulca-Judges and Prisoners meet a like Fate-Exceeding cold Weather-Drake regarded as a god by the Californians-Sails for the Moluccas-Visits Ternate and Celebes-Crab Island-The Pelican upon a Reef-The Return Voyage-Protest of the Spanish Ambassador-He styles Drake the Master-Thief of the Unknown World-Queen Elizabeth on board the Pelican-Drake's Use of his Fortune-His Death-The Voyage of John Davis to the North-west-Policy of Queen Elizabeth-Thomas Cavendish-His first Voyage-Exploits upon the African and Brazilian Coasts-Port Desire-Port Famine-Battles with the Araucanians-Capture of Paita-Capture of the Santa Anna-The Return Voyage-Cavendish's second Voyage-The Spanish Armada

CHAPTER VIII -- Discovery of the Solomon Islands by Mendana-He seeks for them again thirty years later-The Marquesas Islands-Arduous Voyage-Santa Cruz-Hostilities-War, and its results-Death of Mendana-Quiros conducts the Ships to Manilla-Attempts of the Dutch to discover a North-east Passage-Voyage of Wilhelm Barentz-Arrival at Nova Zembla-Winter Quarters-Building a House-Fights with Bears-The Sun disappears-The Clock stops, and the Beer freezes-The House is snowed up-The Hot-Ache-Fox-Traps-Christmas Eve-Twelfth Night -Return of the Sun-The Ships prove unseaworthy-Preparations to depart in the Boats-Death of Barentz-Arrival at Amsterdam-Results of the Voyage-The Five Ships of Rotterdam-Jacob Mahu-Sebald de Weert-Disasters in the Strait of Magellan-The Fleet is scattered to the Winds-Return of only One Vessel to Holland-Voyage of Oliver Van Noort-First Dutch Voyage of Circumnavigation-Quiros' Theory of a Southern Continent-His Arguments and Memorials-His first Voyage--Discoveries-Encarnacion-Sagittaria, or Tahiti-Espiritu Santo-Return-Renewed Solicitations-Death of Quiros-The Muscovy Company of London-Henry Hudson-His Voyages to Spitzbergen and Nova Zembla -His Voyage to America-Casts anchor at Sandy Hook-Ascends the Hudson River as far as the Site of Albany-His Voyage to Iceland and Hudson's Bay-Disastrous Winter-Mutiny-Hudson set adrift-His Death-The Fleet of Joris Spilbergen-Trade at Mocha Island-Treachery at Santa Maria-Terrible Battle between the Dutch and Spanish Fleets-Spilbergen sails for Manilla-Arrival at Ternate-His return home-The Voyage of Schouten and Lemaire-Discovery of Staten Land-Cape Horn --Lemaire's Strait-Arrival at Batavia-Confiscation of the Ships-General Results of the Voyage-The Voyage of William Baffin-Arctic Researches during the Seventeenth Century. . . 149

SECTION IV.

FROM THE DISCOVERY OF CAPE HORN TO THE ARCTIC EXPLORATIONS, 1616-1854.

CHAPTER IX.—The Mayflower—Her Appearance—The Speedwell—Their Departure—Alleged Unseaworthiness of the Speedwell—The Mayflower sails alone—The Equinoctial Storm—Consultations—A remedy applied —First View of the Land—Discovery of New Holland—Tasman ordered to survey the Island—Discovery of Tasmania—of New Zealand—Murderers' Bay—The Friendly Islands—The Feejees—New Britain—Circumnavigation of New Holland—Return to Batavia—Results of the Voyage— Piracy—Origin of the Buccaneers—Their Manner of Life—Dress—Occu-

7 PAGB

PAGE

- CHAPTER XII.-Voyages for the Advancement of Science-Byron, Wallis. and Carteret-Lieutenant James Cook's First Voyage-A Night on Shore in Terra del Fuego-Arrival at Tahiti-The Natives pick their Pockets-The Observatory-A Native chews a Quid of Tobacco-The Transit of Veuus-New Zealand-Cannibalism-Theory of a Southern Continent subverted-New Holland-Botany Bay-The Endeavour on the Rocks-Expedient to stop the Leak-Passage through a Reef-Arrival at Batavia -Mortality on the Voyage home-Cook promoted to the rank of Commander-Cook's Second Voyage-A Storm-Separation of the Ships-Aurora Australis-Dusky Bay-Six Waterspouts at once-Tahiti again-Petty Thefts of the Natives-Omai-Arrival at the Friendly Islands-A Banquet-The Fleet witnesses a Feast of Human Flesh-Disproportion of the Sexes-The New Hebrides-New Caledonia-Return home-Honours bestowed on Cook-Cook's Third Voyage-The North-west Passage-Omai -His Reception at home-The Crew forego their Grog-Discovery of the Sandwich Islands-Nootka Sound-Prince William's Sound-Cook's River -Cape Prince of Wales-Two Continents in Sight-Icy Cape-Return to the Sandwich Islands-Cook is deified-Interview with Tereoboo-Subsequent Difficulties-A Skirmish-Pitched Battle and Death of Cook-Recovery of a portion of his Remains-Funeral Ceremonies-Life and Services of Cook. . 205

PAGE

CHAPTER XIV .- Arctic Explorations-Ross-The Crimson Cliffs-Lancaster Sound-Buchan and Franklin-Parry-The Polar Sea-Winter Quarters -Return home-Parry's Polar Voyage-Boat-Sledges-Method of Travel -Disheartening Discovery-82° 43 North-Ross's Second Voyage-The North Magnetic Pole-Back's Voyage in the Terror-Sir John Franklin's Last Voyage in the Erebus and Terror-Efforts made to relieve him-Discovery of the Scene of his First Winter Quarters-The Grinnell Expedition-The Advance and Rescue-Lieutenant de Haven-Dr. Kane-Return of the Expedition-Kennedy's Expedition-Sir Edward Belcher-M'Clure-Discovery of the North-west Passage-Junction of M'Clure and Kellett-Episode of the Resolute-Traces of the Fate of Sir John Franklin -The Second Grinnell Expedition-The Advance in Winter Quarters-Total Darkness-Sledge-Parties-Adventures-The First Death-Tennyson's Monument-Humboldt Glacier-The open Polar Sea-Second Winter-Abandonment of the Brig-The Water again-Upernavik-Death of Dr Kane-Return of the Fox Expedition-Captain M'Clintock's Account of the Voyage-Discovery of Records and Relics-Death of Sir John Franklin-Captain M'Clintock's answer to the question, May not some of the crews still be alive among the Esquimaux ? . . . 250

.



.

100

PREFACE.

IN presenting this edition, the Editor has to state, that it is to some extent abridged from the original American work, by FRANK B. GOODRICH.

In the treatment of a noble and inspiriting subject, the author has displayed extensive knowledge and patient research—having succeeded in bringing together materials of a very varied and interesting nature, pleasantly digested, in a style which secures the attention of the reader. Occasionally, however, he indulged in remarks betraying a bias which too frequently arises from an over-indulgence of national feeling. Such allusions have been suppressed; the volume has also been divested of introductory matter containing ingenious but airy speculations as to the origin of navigation, and its progress previous to the Christian era; a chapter on the question as to who was the first to apply steam to navigation; and another regarding the attempts to lay the Atlantic cable.

These, with some other points, were considered out of place in a volume devoted to the treatment of "THE SEA AND HER FAMOUS SAILORS." The object of the present volume is the narration of known facts and established results connected with the hazardous and heroic deeds of

PREFACE.

our forefathers on that changeful element which is the bulwark of British supremacy, while it is the highway of the world.

Whether we contemplate "THE SEA AND HER FAMOUS SAILORS" as a careful and concise ocean-history, or as a compact series of Tales and Adventures, it possesses many attractive as well as useful features. The rise and fall of maritime greatness in connexion with the annals of various nations—the enterprise and endurance which won and maintained naval power—together with the innumerable episodes of brilliant daring which mark the career of our earlier adventurers—all combine to throw a charm around these pages. In reading the history of the storm-tossed adventurers, we share their perils and feel pride in their successes. Their memory is ever green, for in such events we have a common interest, whatever be the flag of the brave men who bore it.

London, 1859.

THE SEA AND HER FAMOUS SAILORS.

INTRODUCTION.

"THE sea is His, and He made it," cries the Psalmist of Israel, in one of those bursts of enthusiasm in which he so often expresses the whole of a vast subject by a few simple words. Whose else, indeed, could it be, and by whom else could it have been made? Who else can heave its tides and appoint its bounds? Who else can urge its mighty waves to madness with the breath and wings of the tempest, and then speak to it again in a master's accents, and bid it be still? Who else could have peopled it with countless inhabitants, and filled it from its deepest bed to its expanded surface, filled it from its centre to its remotest shores, filled it to the brim with beauty and mystery and power? Majestic ocean ! Glorious sea ! No created being rules thee or made thee.

There is mystery in the sea. There is mystery in its depths. It is unfathomed, and perhaps unfathomable. What glittering riches, what heaps of gold, what stores of gems, there must be scattered in lavish profusion in the ocean's lowest bed! What spoils from all climates, what works of art from all lands, have been engulfed by the insatiable and reckless waves! Who shall go down to examine and reclaim this uncounted and idle wealth ? Who bears the keys of the deep ? who but He to whom the wildest waves listen reverently, and to whom all nature bows ; He who shall one day speak, and be heard in ocean's profoundest caves ; to whom the deep, even the lowest deep, shall give up its dead, when the sun shall sicken, and the earth and the isles shall languish, and the heavens be rolled together like a scroll, and there shall be NO MORE SEA !

In early times, in the scriptural and classic periods, the great oceans were unknown. Mankind-at least that portion whose history has descended to us-dwelt upon the borders of an inland, mediterranean sea. They had never heard of such an expanse of water as the Atlantic, and certainly had never seen it. The land-locked sheet which lay spread out at their feet was at all times full of mystery, and often even of dread and secret misgiving. Those who ventured forth upon its bosom came home and told marvellous tales of the sights they had seen and the perils they had endured. Homer's heroes returned to Ithaca with the music of the sirens in their ears and the cruelties of the giants upon their lips. The Argonauts saw whirling rocks implanted in the sea, to warn and repel the approaching navigator; and, as if the mystery of the waters had tinged with fable even the dry land beyond it, they filled the Caucasus with wild stories of enchantresses, of bulls that breathed fire, and of a race of men that sprang, like a ripened harvest, from the prolific soil. If the ancients were ignorant of the shape of the earth, it was for the very reason that they were ignorant of the ocean. Their geographers and philosophers, whose observations were confined to fragments of Europe, Asia, and Africa, alternately made the world a cylinder, a flat surface begirt by water, a drum, a boat, a disk. The legends that sprang from these confused and contradictory notions made the land a scene of marvels and the water an abode of terrors.

At a later period, when, with the progress of time, the love of adventure or the needs of commerce had drawn the navigator from the Mediterranean through the Pillars of Hercules into the Atlantic, and when some conception of the immensity of the waters had forced itself upon minds dwarfed by the contracted limits of the inland sea, then the ocean became in good earnest a receptacle of gloomy and appalling horrors, and the marvels narrated by those fortunate enough to return, told how deeply the imagination had been stirred by the new scenes opened to their vision. Pytheas, who coasted from Marseilles to the Shetland Isles, and who there obtained a glance at the bleak and wintry desolation of the North Sea, declared, on reaching home, that his farther progress was barred by an immense black molluse, which hung suspended in the air, and in which a ship would be inextricably involved, and where no man could breathe. The menaces of the South were even more appalling than the perils of the North; for he who should venture, it was said, across the equator into the regions of the sun, would be changed into a negro for his rashness; besides, in the popular belief, the waters there were not navigable. Upon the quaint charts of the Middle Ages, a giant located upon the Canary Islands forbade all farther venture westward, by brandishing his formidable club in the path of all vessels coming from the East. Upon these singular maps the concealed and treacherous horrors of the deep were displayed in the grotesque shapes of sea-monsters and distorted water-unicorns, which were represented as careering through space and waylaying the navigator. Even in the time of Columbus, and when the introduction of the compass into European ships should have somewhat diminished the fantastic terrors of the sea. we find that the Arabians, the best geographers of the time, represented the bony and gnarled hand of Satan as rising from the waves of the sea of darkness-as the Atlantic was then called-ready to seize and engulf the presumptuous mariner. The sailors of Columbus, on reaching the Sargasso Sea, where the collected weeds offered an impediment to their progress, thought they had arrived at the limit of navigation and the end of the world. Five years later the crew of Da Gama, on doubling the Cape of Good Hope, imagined they saw, in the threatening clouds that gathered about Table Rock, the form of a spectre waving off their vessel, and crying woe to all who should thus invade his dread dominion. The Neptune of the classics, in short, who disported himself in the narrow waters of the Mediterranean, and of whose wrath we have read the famous mythologic accounts, was a deity altogether bland and *debonnaire* compared to the gloomy and revengeful monopolist of the seas, such as the historians and geographers of the Middle Ages painted him.

And now Columbus had discovered the Western Continent, Da Gama had found an ocean route to the Indies, and Magellan, sailing around the world, had proved its sphericity and approached the Spice Islands from the East. For centuries, now, the two great oceans were the scenes of grand and useful maritime expeditions. The tropical islands of the Pacific arose, one by one, from the bosom of the sea, to reward the navigator or relieve the outcast. For years property was not safe upon the sea, and trading ships went armed, while the armed vessels of nations turned buccaneers. Commerce was by and by spread over the world, and civilisation and Christianity were introduced into the desert and the wilderness. Two centuries more, and steam made the Atlantic ocean a ferry-transit.

The ocean, then, has a history; it has a past worth narrating, adventures worth telling, and it has played a part in the advancement of science, in the extension of geographical knowledge, in the spread of civilisation and the progress of discovery, which it is eminently worth our while to ponder and digest. Its gradual submission to invasion from the land; its successive surrender of the islands in the tropics and the ice-mountains at the poles; its slow but certain release of its secrets; its final abandonment of its exclusiveness—with a multitude of attendant incidents, accidents, battles, disasters, shipwrecks, famines, robberies, mutinies, piracies—form the theme and purpose of these pages.

SECTION I.

FROM THE COMMENCEMENT OF THE CHRISTIAN ERA TO THE APPLICATION OF THE MAGNETIC NEEDLE TO EUROPEAN NAVIGATION.—A. D. 1300.

CHAPTER I.

NAVIGATION DURING THE ROMAN EMPIRE—THE CRUSADES —THE SCANDINAVIAN SAILORS.

WE have taken the birth of Christ as a point of departure in the history of navigation, merely because of the prominence of that event in the annals of the world, not on account of any connexion that it has with the chronicles of the sea. So far from that, the first five centuries of the Christian era are an absolute blank in all matters which pertain to our subject. The Roman Empire rose and fell ; and its rise and fall concerned the Mediterranean only. Not even Julius Cæsar, the greatest man in Roman history, has a place in maritime records ; unless, when crossing the Adriatic in a fishing-boat during a storm, his memorable words of encouragement to the fisherman, "Fear nothing ! you carry Cæsar and his fortunes !" are sufficient to connect him with the sea. Neither Pompey, nor Sylla, nor Augustus, nor Nero, nor Titus, nor Constantine, nor Theodosius, nor Attila, can claim part or lot in the dominion of man over the ocean. And so we glide rapidly over five centuries.

Upon the invasion of Italy by the barbarians, A.D. 476, the Veneti, a tribe dwelling upon the north-eastern shores

17

of the Adriatic, escaped from their ravages by fleeing to the marshes and sandy inlets formed by the deposits of the rivers which there fall into the gulf. Here they were secure ; for the water around them was too deep to allow of an attack from the land, and too shallow to admit the approach of ships from the sea. Their only resource was the water and the employments it afforded. At first they caught fish ; then they made salt, and finally engaged in maritime traffic. Early in the seventh century their traders were known at Constantinople, in the Levant, and at Alexandria. Their city soon covered ninety islands, connected together by bridges. They established mercantile factories at Rome, and extended their authority into Istria and Dalmatia. In the eighth century they chased the pirates, and in the ninth they fought the Saracens. At this period Genoa, too, rose into notice, and the Genoese and the Venetians at once became commercial rivals and the monopolists of the Mediterranean.

And now Peter the Hermit, barefooted and penniless, inveighing against the atrocities of the Turks towards Christians at Jerusalem, exhorted the warriors of the Cross to take up arms against the infidels. He inspired all Europe with an enthusiasm like his own, and enlisted a million followers in the cause. The passion of the age was for war, peril, and adventure ; and fighting for the Sepulchre was a more agreeable method of doing penance than wearing sackcloth or mortifying the flesh. The First Crusade, a motley array of knights, spendthrifts, barons, beggars, women, and children, set out upon their wild career. Then came the Second, the Third, and the Fourth. Crusading was the amusement and occupation of two centuries. Two millions of Europeans perished in the cause before it was abandoned. A few words concerning its effects upon the civilization of Europe, are necessary here, in direct pursuance of our subject.

During their stay in Palestine the Crusaders learned, and in a measure acquired, the habits of Eastern life. They



THE DOGE OF VENICE WEDDING THE ADRIATIC.

The Pope, Alexander III., sent the Doge the famous nuptial ring with which, in assertion of his naval supremacy, "to well the Adriatic." The ceremony was performed from the deck of the Bucentaur, or state-galley, with every possible accompaniment of pomp and parade. The ressel was crowned with flowers like a bride, and amid the harmonies of music and the acchanging of the spectators the ring was dropped into the sea. - PAOR 19

brought back with them a taste for the peculiar products of that region-jewels, silks, cutlery, perfume, spices. Α brisk commerce through the length and breadth of the Mediterranean was the speedy consequence. Genoa, Pisa, Florence, Venice, covered the waters of their inland sea with sails, trafficking from the ports of Italy to those of Syria and Egypt. In every maritime city conquered by the Crusaders, trading-stations and bazaars were established. Marseilles obtained from the kings of Jerusalem privileges and monopolies of trade upon their territory. Venice surpassed all her rivals in the splendour and extent of her commerce, and it was for this that the Pope, Alexander III., sent the Doge the famous nuptial ring with which, in assertion of his naval supremacy, "to wed the Adriatic." The ceremony was performed from the deck of the Bucentaur, or state-galley, with every possible accompaniment of pomp and parade. The vessel was crowned with flowers like a bride, and amid the harmonies of music and the acclamations of the spectators the ring was dropped into the sea. The Republic and the Adriatic, long betrothed, were now indissolubly wedded. This ceremony was repeated from year to year.

The Normans, the Danes, the Dutch, imitated the example of the Italians, or, as they were then called, the Lombards, but were rather occupied in conveying provisions to the armies than in trading for their own account.

It was during the Crusades that the French navy was created. Philip Augustus, who, on his way to Syria, and thence home again, could not have remained insensible to the advantages of possessing a strong force upon the ocean, formed, upon his return, the nucleus of a national fleet, for the purpose of defending his coasts either against pirates or foreign invasion.

While the necessity of transporting articles from the East to supply the demand thus created in the West gave a stimulus to commerce and navigation, manufactures were encouraged and developed by the operation of the same cause. The Italians learned from the Greeks the art of weaving silk, which soon resulted in the weaving of cloth of gold and silver. From the manufactories of Syria, where stuffs were made of camels' hair, improvements were introduced into the manufactures of Europe, where they were woven of no other material than lambs' wool. Palestine also suggested to crusaders returning home the advantages of windmills for grinding flour. Arabia furnished the art of tempering arms and polishing steel, of chasing gold and silver, of mounting stones in rich and massive settings. Constantinople furnished the Christians with many splendid specimens of ancient art.

Nearly all the Gothic monuments of Europe which still excite the admiration of the tourist owe their existence to this communication with the Greeks by means of the Crusades, and to the wonder which seized the Frank and Lombard at the sight of the churches and palaces of Byzantium. Painting upon glass was also brought from Constantinople, and the early painters of Christendom were speedily employed in tracing in colours, upon the windows of abbeys and cathedrals, the exploits of the Crusaders and the triumphs of the Cross.

From the Arabs and the Greeks, too, the Europeans received their first lessons in the natural and exact sciences. Imperfect and incomplete as were the astronomy, the botany, the mathematics, and the geography of the Arabians, they were far in advance of the same professions as understood and practised in Europe. The languages were improved and enriched by the association and exchange of ideas into which English, Germans, Italians, and French were forced.

It is obvious, therefore, that the effect of the Crusades was to give the people of Europe a new motive for maintaining an intercourse with the people of Asia. They had seen their superior civilisation, and sought to introduce it among themselves. They had learned to appreciate their skill in the arts, and resolved to acclimate those arts at home. They had accustomed themselves to many articles of luxury, which had become articles of necessity, and which it was now essential, therefore, to transport from the Levant, from the Red Sea and the Persian Gulf, to the Bay of Venice and the Gulf of Genoa. There was a demand, in short, in the West, for the products, the manufactures, the arts, of the East. Here was the origin of the immense Eastern commerce which now fell into the hands of the Genoese and Venetians, and which, resulting from the Crusades, compelled us to the digression we have made. It is not our purpose, however, to refer more at length to this commerce, as it was carried on upon seas which had been navigated for twenty centuries ; and we must hasten forward to the period when new paths were laid out over the immensity of the waters.

A map, published just anterior to the First Crusade, fully displays the ignorance which then prevailed in geographical science. The sea, as in the age of Homer, is made to surround the world as a river, the land being divided into three parts, Europe, Asia, and Africa. Africa and Asia are joined together in the south, and the Indian Ocean is an inland sea. Asia is as large as the other two continents combined. On the east there is a small spot indicated as the position of the Garden of Eden by the words, Hic est Paradisus. Europe and Africa are separated from Asia by a long canal, which may be either the Nile or the Hellespont. Africa is still considered the land of mystery and fable : its northern part only is considered inhabitable, the south being even unapproachable, on account of the torrents of flame poured on it by the sun. The Frozen Ocean, the Baltic, the White Sea, and the Caspian, are all united. The northern regions are represented as forming one single island. Scandinavia is made the birthplace and residence of the Amazons, the famous women-warriors to whom antiquity had given a home in the Caucasus.

We shall, in due order, proceed to show that the indi-

rect and remote effect of the Crusades, and of the intercourse produced by them between two totally separated regions, was to induce the Discovery of America, the Doubling of the Cape of Good Hope, and the Passage of the Straits at the southern extremity of Patagonia,—results due to COLUMBUS, VASCO DA GAMA, and MAGELLAN, every one of whom were seeking, in the voyages which have rendered them immortal, another passage to the Indies than that held by the Italians-so far as they could prosecute it in vessels upon the Mediterranean. But, before we can proceed from the coasting enterprises of the Lombards upon the land-locked waters of their inland sea, to the daring ventures of the Portuguese and Spaniards upon the raging billows of the Tropical and South Atlantic, we must turn for a moment to the North of Europe, and inquire into the maritime achievements of the Anglo-Saxons and the Northmen during the Dark and Middle Ages.

The nations inhabiting the borders of the Baltic and the coasts of Norway, as well as those dwelling on the shores of the German Ocean, were situated quite as favourably for maritime enterprise as those upon the banks of the Mediterranean. Though their earliest expeditions by sea were not stimulated by the same cause-the desire for commercial intercourse-they arose from causes equally active. While the Mediterranean countries possessed a fruitful soil and a balmy climate, those of the North, under a sky comparatively ungenial, afforded their inhabitants but a few of the articles which they needed : they were led, therefore, to increase their power by sea, in order to establish themselves in more favoured climes, or at least to obtain from them by plunder what their own country could not furnish. Thus they neglected the arts of agriculture, and became inured to a life of piracy upon the sea. They spent their lives in planning and executing maritime expeditions. Fathers gave fleets to their sons, and bade them seek their fortune on the ocean highway. The ships, at first small-being mere barks propelled by twelve oars-came at last to be capable

of carrying one hundred or one hundred and twenty mcn. They were supplied with stones, arrows, ropes with which to overset small vessels, and grappling-irons with which to come to close quarters.

It would be remote from our purpose to notice these piratical excursions, were it not that they sometimes resulted in discovery or commerce. Many of the marauders settled permanently in England in the seventh century, and established there the Anglo-Saxon dominion. Alfred, their most celebrated king, obliged to defend his territory from the Danes, turned his attention zealously to everything connected with ships, commerce, discovery, and geography, and became the first founder of that naval power which was at a later period to be the world's dread and admiration. The idea of ship-building once conceived, it was prosecuted with astonishing vigour. Alfred not only multiplied their number, but introduced material improvements. Towards the latter part of his reign, his fleet numbered one hundred sail : it was divided into small squadrons, and stationed at various places along the coast.

In the year 863, a Dane of Swedish origin, named Gardar, adventurously pushing off into the Northern Ocean, though upon an object which history has not recorded, discovered the island-rock whose appropriate name is Iceland. Eleven years later, a navigator named Ingolf colonized the country, the colonists, many of whom belonged to the most esteemed families in the North, established a flourishing The situation of these people, isolated in the republic. midst of an arctic ocean, and their relation to the mothercountry, compelled them to exert and develop their hereditary maritime proclivities. In 877, a sailor named Gunnbjörn saw a mountainous coast far to the west, supposed to be now concealed or rendered inaccessible by the descent of arctic ice. Erik the Red, who had been banished from Norway for murder, and had settled in Iceland, was in his turn outlawed thence in 983; he sailed to the west and discovered a land which he called Greenland, because, as he said.

" people will be attracted hither if the land has a good name." He returned to Iceland, and, in the year 985, a large number of ships—according to some authorities, thirty-five—followed him to the new settlement and established themselves on its south-western shore.

In 986, Bjarni Herjulfson-Bjarni the son of Herjulf, in a voyage from Iceland to Greenland, was driven a long distance from the accustomed track. He at last saw land to the west, and took counsel with his men as to what land it could be. Bjarni declared it his opinion that it was not Greenland. They sailed close in shore, and noticed that there were no mountains, but that the land was undulating and well wooded. They left the land on their larboard side, and sailed away for two days, when they saw land again. They asked Bjarni if he thought this was Greenland; and he replied that "he thought it as little to be Greenland as the other, as he saw no high ice-hills." The sailors wished to wood and water there, but Bjarni would not consent. They sailed for three days to the north, and saw a bold shore with high mountains and ice-hills. Bjarni would not land, saying, "To me this land appears little inviting." Sailing for four days more to the north-east. they came to a country which Bjarni confidently pronounced to be Greenland, where he landed and afterwards settled. Various data furnished by this narrative, in the original Icelandic records, have enabled geographers to determine the various coasts thus dimly seen by Bjarni, but upon which he did not land. They are supposed to have been those of Long Island, Rhode Island, Massachusetts, Nova Scotia, and Newfoundland.

In the year 994, Leif Erikson—Leif the son of Erik the Outlaw—bought Bjarni's ship, and engaged thirty-five men to navigate it, as he intended to sail upon a voyage of discovery. He asked his father Erik to be the captain ; but Erik declined, being, as he said, well stricken in years. They sailed away into the sea, and discovered first the land which Bjarni had rejected. They went ashore, saw

no grass, but plenty of icebergs, and an abundance of flat stones. From the latter circumstance they named the place *Helluland*, *hellu* signifying a flat stone. There can be no doubt that the spot thus named is the modern Newfoundland. They went on board again, and proceeded on their way. They went ashore a second time, where the land was flat, and covered with wood and white sand. "This," said Leif, "shall be named after its qualities, and called Markland" (woodland). This is undoubtedly Nova Scotia. They sailed again to the south for two days and came to an island which lay to the eastward of the mainland. They observed dew upon the grass, and this dew, upon being touched with the finger and raised to the mouth, tasted exceedingly sweet. This appears to have been Nantucket, where honey-dew is known to abound.

They proceeded on through a tract of shoal water, which corresponds with the sound between Nantucket and Cape Cod, and appear to have run across the mouth of Buzzard's Bay, and to have ascended the Pocasset River as far as Mount Hope Bay, which they took for a lake. Here they cast anchor, and, "bringing their skin cots from the ship, proceeded to make booths." They remained during the winter, finding plenty of salmon in the river and lake. "The nature of the country was, as they thought, so good, that cattle would not require house-feeding in winter, for there came no frost, and little did the grass wither there." Their statement that on the shortest day the sun was above the horizon from half-past seven till half-past four, enables geographers to fix the latitude of the place where they were at 41° 43' 10", which is very nearly that of Mount Hope Bay.

One evening a man of the party was missing—a German named Tyrker, whom Leif regarded as his foster-father. He determined to seek for him, and for this purpose chose twelve reliable men. Tyrker soon returned and said that he had been a long distance into the interior, and had found vines and grapes. "But is this true, my fosterer ?" said Leif. "Surely is it true," he returned; "for I was bred up in a land where there is no want of either vines or grapes." The next morning Leif said to his sailors, "We will now set about two things, in that the one day we gather grapes, and the other cut vines and fell trees, so from thence will be a loading for my ship." The record states that the long-boat was filled with grapes. Leif gave the country the name of Vinland, from its vines.

To the reader of the present day it may seem that the wild vines of Massachusetts and Rhode Island can hardly have been so prominent a feature of the native products as to have given a name to the whole region. But it is certain that six centuries later the Puritans found wild maize and grapes growing there in profusion, while the neighbouring island of Martha's Vineyard received its name from the English for a precisely similar reason.

Upon the return of Leif to Greenland, his brother Thorwald thought that "these new lands had been much too little explored." Leif gave him his ship, and he put out to sea, with thirty men, in the year 1002. Nothing is known of their voyage till they came to Leif's booths in Vinland. They laid up their ship, caught fish for their support, and spent a pleasant winter. They passed two years in exploring the interior, and then returned by the north, where Thorwald was killed in a battle with the Esquimaux.

But a more successful discoverer than any of these was Thorfinn Karlsnefne—that is, Thorfinn the Predestined Hero. He was a wealthy merchant of Iceland, the heir of Danish, Swedish, and Norwegian princes. He visited Greenland in 1006, where he married Gudrida, the widow of an Icelandic adventurer, and in 1007 sailed, in three ships, and with one hundred and sixty men, upon a voyage to Vinland. His wife went with him, and, in the autumn of the same year, bore him a son named Snorri, who was, of course, the first of European blood born in America. Thorfinn remained here three years, and had many communications with the aborigines. A singular result of this relation may perhaps be traced in the names successively given to one spot. The Northmen called one of their settlements Hóp, and the Puritans, six centuries later, found that the Indians called it Haup. It would appear that they had continued, in their own tongue, the appellation bestowed upon the place in the Norse language. The Puritans anglicized it, and called it Mount Hope.

We have no accounts of any further voyages made by the Northmen to America. The records were preserved in the literature of the island, but the memory of them gradually faded away from the popular mind.

Several writers claim for these early navigators a degree of merit beyond that which they are willing to accord to Columbus. "How different," they say, "were the circumstances under which the two voyages were made! The Northmen, without compass or quadrant, without any of the advantages of science, geographical knowledge, personal experience, or previous discoveries, without the support of either kings or governments—which Columbus, however discouraged at the outset, eventually obtained—but guided by the stars, and upheld by their own private resources and a spirit of adventure which no dangers could repress, crossed the broad Northern ocean and explored these distant lands."

This is all true; and doubtless our wonder at the success with which these early voyages were prosecuted would be augmented tenfold, could we obtain authentic information upon the character and capacity of the ships in which they were made. Nothing reliable exists upon this subject, except a few rude inscriptions; and from these, it would actually appear that the vessels used had no decks, and that they were partly propelled by oars. However navigation may have improved since the days of the Northmen, it is certain that no sailor would now attempt an Arctic voyage in an open boat; and when we read of the perils and sufferings of our modern Polar adventurers, it is impossible not to be amazed at the success with which the Danes and Norwegians, with their slender appliances, endured and outlived them.

CHAPTER II.

THE TRAVELS OF MARCO POLO—THE FIRST MENTION OF THE LOADSTONE IN HISTORY.

THE call to arms against the Moslems fixed, as we have said, the attention of Europe upon the East. The travels of Carpini, Rubruquis, and Ascelin, in Tartary and in China, revealed the existence of numerous tribes in localities believed to be occupied by the ocean. Hordes of savages, we are told, and whole nations of powerful and warlike people, emerged from the imaginary waters of Eoüs, the fabulous sea of antiquity and bed of Aurora. Marco Polo, whose celebrated journey was performed during the twenty years closing the thirteenth century, made known the centre and eastern extremity of Asia, Japan, a portion of the islands of the Indian Archipelago, a part of the continent of Africa, and, by hearsay, the large island of Madagascar. We subjoin a brief account of that portion of his travels which was prosecuted by sea.

He became a great favourite with Kublai Khan, whose winter capital was Khanbalik or Pekin, and served him for many years as one of his confidential officers. He was the first European who heard of the island of Japan, of which he speaks thus :—" Zipangu, or Cipango, is an island in the Eastern Ocean, situated about fifteen hundred miles from the mainland. It is quite large. The inhabitants have fair complexions, are civilized in their manners, though their religion is idolatry. They have gold in the greatest abundance, but its exportation is forbidden. The entire roof of the sovereign's palace is stated to be covered with a plating of gold, as we cover churches and other buildings with lead. So famous is the wealth of this island that Kublai Khan was fired with the desire of annexing it to his dominions. He sent out a numerous fleet and a powerful army; but a violent storm dispersed and wrecked the ships, and thirty thousand men were thrown upon a desert island a few miles from Cipango. They expected nothing but death or captivity, as they could obtain no means of subsistence. Being attacked from Cipango, they got in the rear of the enemy, took possession of their fleet, and put off for the main island. They kept the colours flying from the masts, and entered the chief city uususpected. All the inhabitants were gone except the women. They took possession, but were closely besieged for six months, until, despairing of relief, they surrendered, on condition of their lives being spared. This took place in the year 1284." Such was the first intelligence of the island of Japan which ever reached the ears of Europeans.

After a stay of seventeen years in China, Marco and his companions resolved to make an attempt to return to their native land. Kublai Khan, however, was unwilling to part with them ; and they owed their final release to a circumstance wholly unexpected. An embassy from Persia had visited Pekin, and had selected one of Kublai's granddaughters for the wife of their prince. They set out with her on their journey to Persia, but, after meeting with incredible obstacles, were obliged to return to the Chinese capital. Marco had, at this time, just returned from a voyage among the islands of the Indian Sea, and had laid before the khan his observations upon the feasibility of navigation in those waters. The ambassadors sought an interview with Marco Polo, and found that they had all a common interest-that of getting away as speedily as possible. The khan was forced to facilitate the departure of the envoys, though it deprived him of his friends the Venetians. Preparations were made upon a grand scale for the expedition. Fourteen four-masted ships, a part of

them with crews of two hundred and fifty men, were equipped and victualled for two years. The khan bade the Polo party an affectionate adieu, making them his ambassadors to the principal courts of Europe, and extorting from them a promise to return to his service after a visit to their own country.

Thus honourably dismissed, they set sail from the port of Amoy in 1291. They coasted along the shores of Cochin-China, and came in sight of the islands of Borneo and Java, though they did not land there. At the island of Bintan, near the Straits of Malacca, they obtained some knowledge of the kingdom of the Malays at the southern extremity of the peninsula. They landed upon Sumatra, and visited many parts of the island. Marco thus speaks be known that what is reported respecting the mummies of pigmies sent to Europe from India is only an idle tale, these pretended human dwarfs being manufactured in this island in the following manner. The country produces a large species of monkey having a countenance resembling that of a man. The Sumatrans catch them, shave off their hair, dry and preserve their bodies with camphor and other drugs, and prepare them generally so as to give them the appearance of little men. They then pack them in wooden boxes and sell them to traders, by whom they are vended for pigmies in all parts of the world. But there are no such things as pigmies in India or anywhere else. It is mere monkey-trade."

From Sumatra, Marco and his companions sailed into the Bay of Bengal, touched at the Andaman and Nicobar Islands, arrived at Ceylon, and doubling the southern point of Hindostan, continued to the northward along its western coast. The pearl-fishery here attracted their attention; and Marco, in his description of the diamonds of a kingdom named Murphili, narrates as a fact a story which was afterwards incorporated in the Adventures of Sinbad the Sailor,—that of picces of meat being thrown by the jewel-

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hunters into inaccessible valleys, whence they were brought back again by eagles and storks with quantities of diamonds clinging to them. But the story occurs in the writings of one of the Christian Fathers of the fourth century, and Marco Polo only gives it as a legend which he heard. He also alludes to the bird called the roc, which was so large that it lifted elephants into the air; its feathers measured ninety spans. The locality frequented by these monstrous ornithological specimens was the island of Madagascar.

The voyage appears to have ended at Ormuz, at the mouth of the Persian Gulf, after a navigation of a year and a half. Six hundred men of the various crews had died upon the way. There is no mention made in history of the return of the fleet to China, though Kublai Khan is known to have died three years after the departure of the Venetians. After various adventures, Marco Polo and his companions arrived in Venice in 1295. They had been absent twenty-one years, and their nearest relatives did not know them. When they attempted to converse in Italian, their use of foreign idioms and barbarous forms of expression rendered their language hardly intelligible. Possession had been taken of their houses by some of their kindred, and they found it difficult to expel them. Their statements were disbelieved, till, by displaying their immense wealth and their priceless collections of jewels and precious stones, they forced their countrymen to give credit to adventures which must clearly have been extraordinary, to have resulted in such acquisitions of treasure. Marco's riches gave him the name of Milione ; and he is designated in the records of the Venetian Republic, and upon the title-page of his work-still extant-as Messer Marco Milione.

He was induced to write an account of his adventures in the following manner. A war between the Venetians and the Genoese resulted in the capture of the galley of which he was commander. He was imprisoned during four years at Genoa. His surprising history becoming known,

he was visited by all the principal inhabitants, who were anxious to listen to his narrative. The frequent necessity of repeating the same story became intolerably irksome to him, and he resolved to commit it to writing. He thus gave the first impulse to the promotion of geographical science. He procured from Venice the original notes he had made in the course of his travels, and, with their assistance and that of a Genoese amanuensis, the narrative was composed in his cell. It is a work of great research and deep interest. Formerly read for its marvels, it is now perused as the earliest authentic account of a region which still remains a terra incognita, and whose inhabitants repel curiosity and decline mingling with other nations upon the usual reciprocal terms of fellowship and good-will. Marco Polo is now justly considered the founder of the modern geography of Asia. It was long before any new discoveries were added to those of the illustrious Venetian, but his original statements were confirmed in many quarters : by Oderic, who visited India and China in 1320; by Schiltberger of Munich, who accompanied Tamerlane in his expeditions through Central Asia; by Pegoletti, an Italian merchant who went to Pekin through the heart of Asia in 1335; and by Clavijo in 1403, who was sent by Spain as ambassador to Samarcand.

Thus a European had been to the regions of spices and had returned. From this time forward the world was to know no rest till the route by sea had been discovered.

We have arrived at a momentous epoch in the history of the sea. It was at this period that the mariner's compass was—we do not say invented—but introduced into European navigation. That this admirable instrument, which, in half a century, changed the face of the earth, by leading to the discovery of America and thus proving the sphericity of the world, should remain unclaimed by its author, and that we are unable to point to him who thus blessed and benefited his race, must always be a subject of regret. So far from being able to name the individual to whom the invention is due, it has long been deemed impossible to fix even upon the nation who first used the needle at sea. We hope, however, by availing ourselves of recent researches made in France, to arrive at a conclusion not only satisfactory but inevitable. In tracing the history of the compass, we must naturally begin with the magnet.

The ancients were fully acquainted with the loadstone, and with its power of attracting iron, though they were totally ignorant of its polarity. That they were so, is evident from the fact that the classic authors and ancient works upon navigation and kindred subjects do not furnish one word upon the subject. Claudian has left, in one of his idyls, a long description of the stone, and of its peculiar, indeed magical affinity for iron. Had he entertained the most distant idea that this stone could communicate to a steel needle the power of indicating the north, it is not to be supposed for an instant that he would have omitted mentioning it. The earliest name of the loadstone was Hercules' Stone, which was soon changed to magnes, from the fact that it was found in abundance in a region called Magnesia, in Lydia. Hence our word magnet. It was not till the fourth century of our era that the quality of repelling as well as of attracting iron seems to have been discovered. Marcellus, the physician of Theodosius the Great, is the first author who mentions this new quality.

The Romans, who acquired a knowledge of the magnet from the Greeks, preserved the name, though several of their authors, and Pliny among them, mention a tradition, that the magnet was so called from a shepherd named Magnes, who was the first to discover a mine of loadstone, by the nails in his shoes clinging to the metal.

The first mention in European history of the polarity of the magnetized needle, and of its importance to mariners, occurs in a satirical French poem written in 1190 by one Guyot de Provins. It may be very properly inferred, from the fact that the poet does not merely allude to the com-

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pass, but describes it and the polar star at some length, that it was not generally known, and, in fact, had been lately introduced into the Mediterranean. Whence it had been introduced there, we shall learn as we proceed.

The second historical mention of the compass occurs in a description of Palestine by Cardinal Jacques de Vitry, in the year 1218, in which is the following passage :——" The loadstone is found in India, to which, from some hidden cause, iron spontaneously attaches itself. The moment an iron needle is touched by this stone, it at once points towards the North Star, which, though the other stars revolve, is fixed as if it were the axis of the firmament: from whence it has become necessary to those who navigate the seas."

Brunetto Latini, a grammarian of Florence, and preceptor of Dante, settled in Paris about the year 1260, and composed a work entitled the "Treasure," in which he distinctly describes the process and the consequence of magnetizing a needle. He also went to England, and, in a letter of which fragments have been published, writes thus: —" Friar Bacon showed me a magnet, an ugly and black stone, to which iron doth willingly eling : you rub a needle upon it, the which needle, being placed upon a point, remains suspended and turns against the star, even though the night be stormy and neither star nor moon be seen ; and thus the mariner is guided on his way."

The Italian Jesuit Riccioli, in his work upon Geography and Hydrography, states, that before 1270, the French mariners used "a magnetized needle, which they kept floating in a small vessel of water, supported on two tubes, so as not to sink."

All these authors agree in fixing the period at which the use of the needle was popularized in Europe, at the latter part of the twelfth and the commencement of the thirteenth century. Not one of them mentions the inventor by name, or even indicates his nation. This circumstance leads to the conviction that it was unknown to them, and that, consequently, the inventor was not a European. The theory that the Europeans obtained it from the Arabians, and the Arabians from the Chinese, is supported by the following facts :---

A manuscript work, written by an Arabian named Bailak, a native of Kibdjak, and entitled "The Merchant's Guide in the Purchase of Stones," thus speaks of the loadstone in the year 1242 :--- " Among the properties of the magnet, it is to be noticed that the captains who sail in the Syrian waters, when the night is dark, take a vessel of water, upon which they place a needle buried in the pith of a reed, and which thus floats upon the water. Then they take a loadstone as big as the palm of the hand, or even smaller. They hold it near the surface of the water, giving it a rotary motion until the needle turns upon the water : they then withdraw the stone suddenly, when the needle, with its two ends, points to the north and south. I saw this with my own eyes, on my voyage from Tripoli, in Syria, to Alexandria, in the year 640. [640 of the Hegira, 1240, A.D.] I heard it said that the captains in the Indian seas substitute for the needle and reed a hollow iron fish, magnetized, so that, when placed in the water, it points to the north with its head and to the south with its tail. The reason that the fish swims, not sinks, is that metallic bodies, even the heaviest, float when hollow, and when they displace a quantity of water greater than their own weight."

It may fairly be inferred from this passage, that, at the time spoken of (1240), the practice was already of long standing in this quarter, and that the needle and its polarity had been long known and employed at sea. That is, the Arabs had become familiar with the loadstone in 1240, while Friar Bacon regarded it, in England, as a curiosity in 1260—twenty years afterwards. The priority of the invention would seem to be thus incontestably proven for the Arabs. But we shall see speedily that it derived its origin from a region situated still farther to the east, and many centuries earlier.

A famous Chinese dictionary, terminated in the year 121 of our era, thus defines the word Magnet :--- " The name of a stone which gives direction to a needle." This is quoted in numerous modern dictionaries. One published during the Tsin dynasty-that is, between 265 and 419, states that ships guided their course to the south by means of the magnet. The Chinese word for magnet-Tchi nan ----signifies, Indicator of the South. It was natural for the Chinese, when they first saw a needle point both north and south, to take the Antarctic pole for the principal point of attraction, for with them the south had always been the first of the cardinal points-the emperor's throne and all the Government edifices invariably being built to face the south. A Chinese work of authority, composed about the year 1000, contains this passage :--- " Fortune-tellers rub the point of a needle with a loadstone to give it the power of indicating the south."

A medical natural history, published in China in 1112, speaks even of the variation of the needle,—a phenomenon first noticed in Europe by Christopher Columbus in 1492: —" When," it says, "a point of iron is touched by a loadstone, it receives the power of indicating the south : still, it declines towards the east, and does not point exactly to the south." This observation, made at the beginning of the twelfth century, was confirmed by magnetic experiments made at Pekin, in 1780, by a Frenchman ; only the latter, finding the variation to be from the north, set it down as from 2° to 2° 30' to the west, while the Chinese, persisting in calling it a variation from the south, set it down as being from 2° to 2° 30' to the east.

Thus, the Chinese, who were acquainted with the polarity of a magnetized needle as early as the year 121, and who noticed the variation in 1112, may be safely supposed to have employed it at sca in the long voyages which they made in the seventh and eighth centuries, the route of which has come down to us. Their vessels sailed from Canton, through the Straits of Malacca, to the Malabar coast, to the mouths of the Indus and the Euphrates. It is difficult to believe that, aware of the use to which the needle might be applied, they did not so apply it.

While thus claiming for the Chinese the first knowledge and application of the polarity of the needle, we may say, incidentally, that it is now certain that they made numerous other discoveries of importance long before the Europeans. They knew the attractive power of amber in the first century of our era, and a Chinese author said, in 324, "The magnet attracts iron, and amber attracts mustard-seed." They ascribed the tides to the influence of the moon in the ninth century. Printing was invented in the province of Chin about the year 920, and gunpowder would seem to have been made there long before Berthold Schwartz mixed it in 1330. Still, it is not necessary to resort to the argument of analogy to support the claims of the Chinese to this admirable invention : the direct evidence is sufficient.

A century ago, Flavio Gioia, a captain or pilot of Amalfi, in the kingdom of Naples, was recognised throughout Europe as the true inventor of the compass. He lived in the beginning of the fourteenth century, and biographers have even fixed the date of the memorable invention at the year 1303. The principal foundation for this assertion was the following line from a poem by Antonio of Bologna, who lived but a short time after Gioia :---

" Prima dedit nautis usam magnetis Amalphis."

Amalfi first gave to sailors the use of the magnet.

The tradition was subsequently confirmed by the statement made by authors of repute, that the city of Amalfi, in order to commemorate an invention of so much importance, assumed a compass for its coat-of-arms. This was believed till the year 1810, when the coat-of-arms of Amalfi was found in the library at Naples. It did not answer at all to the description given of it; instead of the eight wings which were said to represent the four cardinal points and their divisions, it had but two, in which no resemblance to a compass could be traced. Later investigations have, as we have said, completely demolished all the arguments by which the compass was maintained to be of European origin and of modern date. The curious reader will find the extracts from Chinese works which substantiate the Chinese claim, in a volume published in 1834, at Paris, by M. J. Klaproth, and composed at the request of Baron Humboldt.

In the sketch which we are now about to give of the Portuguese vovages to the African coast, it will be remarked that the compass was already introduced and acclimated. No mention whatever is extant of the first venture made upon the Atlantic under the auspices of this mysterious but unerring guide. Science and history must for ever regret that the first European navigator who employed it did not leave a record of the experiment. What would be more interesting to-day than the log of the earliest voyage thus accomplished in European waters? The modern reader would surely give his sympathy, unreservedly, to a narrative in which the navigator should describe his wonder, his terror, his joy, when, throughout the voyage, he saw the tremulous index point invariably north; when, upon the dispersion of the clouds which had concealed the Star from view, it was found precisely where the needle indicated ; when, upon its being diverted from the line of direction by some curious and perhaps incredulous experimenter, it slowly but surely returned, remaining fixed and constant through storm and calm, at midnight and at noon. What would be more interesting than the speculations of such a captain upon the cause of the marvellous dispensation ? And what more amusing than the commentaries of the forecastle, and the learned explanations of the veteran salts to the raw recruits ? But all this absorbing lore has hopelessly disappeared, and the mariner's compass will for ever remain mysterious in its principle, mysterious in its origin, mysterious in its history. We shall have occasion to return to the subject from another point of view, when, in describing the Arctic voyages of the present century, we shall find James Clarke Ross standing upon the North Magnetic Pole.

SECTION II.

FROM THE APPLICATION OF THE MAGNETIC NEEDLE TO EUROPEAN NAVIGATION TO THE FIRST VOYAGE ROUND THE WORLD UNDER MAGELLAN.—A. D. 1300-1519.

CHAPTER III.

DISCOVERIES OF THE PORTUGUESE-BARTHOLOMEW DIAZ.

WE are now to consider a series of voyages, tedious and fruitless at first, successful in the end, undertaken by the Portuguese, in their age of maritime heroism, to discover a passage by sea to the famous commercial region of the Indies, some general knowledge of which had been preserved since the Persian, Macedonian, and Roman Empires. The achievements which we are about to narrate were so surprising, so significant, and so complete, that, as has been aptly remarked, they can never happen again in history, unless, indeed, Providence were to create new and accessible worlds for discovery and conquest, or to replunge mankind for ages into ignorance and superstition. But. before proceeding with the discoveries of the Portuguese, we must mention a previous discovery made by accident in the same region by the French and Spanish.

About the year 1330, a French ship was driven among a number of islands which lay off the coast of the Desert of Sahara. These had been known to the ancients as the Fortunate Islands, and Juba of Mauritania, who is quoted by Pliny, calls two of them by name—Trivaria, or Snow Island, and Canaria, or Island of Dogs. They had been lost to the knowledge of the Europeans for a thousand years, and it was a storm which revealed their existence, as we have said, to a vessel forced by stress of weather to escape from the coast into the open sea. The Spaniards profited by the vicinity of the group to make discoveries and settlements among them. Trivaria became Teneriffe, and Canaria the Grand Canary. It was here that superstition now placed the limits of navigation, and expressed the idea upon maps, by representing a giant armed with a formidable club, and dwelling in a tower, as threatening ships with destruction if they ventured farther out to sea. It is in this immediate neighbourhood we are now about to follow the daring and patient enterprises of the Portuguese.

Don Henry, the fifth son of John I. of Portugal, was placed by his father, in 1415, in command of the city of Ceuta, in Africa, which he had just conquered from the Moors. During his stay here, the young prince acquired much information relative to the seas and coasts of Western Africa, and this first suggested in his mind a plan for maritime discovery, which afterwards became his favourite and almost exclusive pursuit. He sent a vessel upon the first voyage of exploration undertaken by any nation in modern times. The commander was instructed to follow the western coast of Africa, and, if possible, to pass the cape called by the Portuguese Cape Non, Nun, or Noun, This had hitherto been considered the utmost southern limit of navigation by the Europeans, and had obtained its name from the negative term in the Portuguese language --implying that there was nothing beyond. A current proverb expressed the idea thus :---

Whoe'er would pass the Cape of Non

Shall turn again, or else begone.

The fate of this vessel has not been recorded; but Don Henry continued for many years to send other vessels upon the same errand. Several of them proceeded one hundred and eighty miles beyond Cape Non, to another and more

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formidable promontory, to which they gave the name of Bojador-from bojar, to double-on account of the circuit which must be made to get around it, as it stretches more than one hundred miles into the ocean. The tides and shoals here formed a current twenty miles wide; and the spectacle of this swollen and beating surge, which precluded all possibility of creeping along close to the coast, filled these timid navigators with terror and amazement. They dared not venture out of sight of land, and, seized with a sudden remembrance of the fabulous horrors of the torrid zone, they regarded the interposition of this terrific cape as a providential warning, and sailed hastily back to Portugal. There, with that fancy for embellishment peculiar to sailors of all ages, they narrated stories, or, as would be said in the present day, yarns, calculated for ever to dissuade from further adventures in the latitudes of Capes Non and Bojador.

Don Henry, who had returned from Ceuta, resolved, in spite of these obstacles, to employ a portion of his revenue as Grand Master of the Order of Christ, in further maritime experiments. He fixed his residence upon the Sacrum Promontorium of the Romans. Here he indulged that passion for navigation and mathematics which he had hitherto been compelled to neglect. In 1418, two naval officers of his household volunteered their lives in an **a**ttempt to surmount the perils of Bojador. Juan Gonzalez Vasco and Tristan Vax Texeira embarked in a vessel called a *barcha* and resembling a brig with topsails, and steered for the tremendous cape.

Before reaching it, however, a violent storm drove them out to sea, and the crew, on losing sight of their accustomed landmarks, gave themselves up to despair. But, upon the abatement of the tempest, they found themselves in sight of an island four hundred miles to the west of the coast. Thus was discovered Porto Santo, the smallest of the group of the Madeiras, and thus was the feasibility and advantage of abandoning coasting voyages and venturing/boldly out to sea made manifest. The adventurers returned to Portugal, and gave glowing accounts of the fertility of the soil, of the mildness of the climate, and the character of the inhabitants. Vessels were fitted out to colonize and cultivate the island; but a singular and most untoward event rendered it useless as a place of refreshment for navigators. A single rabbit littered during the voyage, and was let loose upon the island with her progeny : these multiplied so rapidly that in two years they ate every green thing which its soil produced. Porto Santo was therefore, for a time, abandoned.

During their residence there, however, Gonzalez and Vax noticed with wonder a strange and perpetual appearance in the horizon to the south-west. A thick, impenetrable cloud hovered over the waves, and thence extended to the skies. Some believed it to be a dreadful abyss, and others a fabulous island, while superstition traced amid the gloom Dante's inscription on the portal of the Inferno :

Abandon hope, all ye who enter here!

Gonzalez and Vax bore this state of suspense with the impatience of seamen, while from dawn to sunset the meteor, or the portent, preserved its uniform sullen aspect. At last they started in pursuit. As the ship advanced, the towering spectre was observed to thicken and to expand until it became horrible to view. The roaring of the sea increased, and the crew called on Gonzalez to flee from the fearful scene. But soon the weather became calm, and faint images of rocks seemed to the excited crew the menacing figures of giants. The clouds dispersed, and the woodlands were unveiled. The seamen rested on their oars, while Gonzalez admired the wild luxuriance of nature in a spot which superstition had so long dreaded to approach. They searched in vain for traces of either inhabitants or cattle. The abundance of building-wood which the island furnished suggested the name of Madeira; and a tract covered with fennel (funcha) marked the site of the future town of Funchal.

Gonzalez and Vax returned at once to Lisbon, where a public day of audience was appointed by the king to give every celebrity to this successful voyage. Madeira was at once colonized and cultivated ; and it is said that Gonzalez, in order to clear a space for his intended city of Funchal, set the shrubs and bushes on fire, and that the flames, being communicated to the forests, burned for seven years. The sugar-cane was planted, and its cultivation yielded immense sums until sugar-plantations were established in Brazil and thus interfered with the monopoly. The attention of the islanders was then transferred to the grape, and from that time to this Madeira has supplied a favourite brand of wine.

Don Henry had now, it would appear, surmounted the principal obstacles opposed by ignorance or prejudice to the object of his laudable ambition. But there were many interests threatened by a continuance of discovery by sea. The military beheld with jealous dislike the distinction obtained by, and now willingly accorded to, a profession they held inferior to their own. The nobility dreaded the opening of a source of wealth which would raise the mercantile character, and in an equal degree lower the assumptions and pretensions of artificial social rank. Political economists suggested that there were barren spots in Portugal as capable of cultivation as any desert islands in the sea or any sandy coasts within the tropics. It was urged, too, that any Portuguese who should pass Cape Bojador would inevitably be changed into a negro, and would for ever retain this brand of his temerity.

While Henry was resisting the arguments of his detractors, his father died, and was succeeded upon the throne by his son Edward. The latter gave every encouragement to the maritime projects of his brother, and, in 1433, one Gilianez, having incurred the displeasure of Henry, determined to regain his favour by doubling Cape Bojador. Though we are without details of the voyage, we know that it was successful. Gilianez reported that the sea beyond Bojador was quite as navigable as the Mediterranean, and that the climate and soil of the coast were agreeable and fertile. He was sent the next year, with Henry's cupbearer, Baldoza, over the same route, and they advanced ninety miles beyond the cape with the conscious pride of being the first Europeans who had ventured so far towards the fatal vicinity of the equator. Though they saw no inhabitants, they noticed the tracks of caravans.

They were ordered, in 1435, to resume their discoveries, and to prolong their voyage till they should meet with inhabitants. In latitude 24° north, one hundred and thirty miles beyond Bojador, two horses were landed, and two Portuguese youths, sixteen years of age, were directed to mount them and advance into the interior. They returned the next morning, saying that they had seen and attacked a band of nineteen natives. A strong force was despatched to the cave in which they were said to have taken shelter : their weapons only were found. This spot was called Angra dos Cavallos, or Bay of Horses. The two vessels continued on forty miles farther, to a place where they killed a large number of seals and took their skins on board. Their provisions were now nearly exhausted, and the expedition, having penetrated nearly two hundred miles beyond the cape, returned to Lisbon.

The Portuguese war with Tangiers now absorbed the entire naval and maritime resources of the country, and the plague of Lisbon stayed for a time the patriotic enterprises of Don Henry. In 1440-1442, expeditions sent in the same direction resulted in the capture and transfer of several Moors to Portugal, and in the payment to their captors, as ransom, of the first GOLD DUST ever beheld by Europeans. A river, or arm of the sea, near the spot where this gold was paid, received, from that circumstance, the name of *Rio del Ouro*. This gold dust at once operated as a sovereign panacea upon the obstinacy and irritation of the public mind. It has been well remarked that " this is the primary date to which we may refer that turn for adventure which sprang up in Europe, and which pervaded all the ardent spirits in every country for the two succeeding centuries, and which never ceased till it had united the four quarters of the globe in commercial intercourse. Henry had stood alone for almost forty years ; and, had he fallen before those few ounces of gold reached his country, the spirit of discovery might have perished with him, and his designs have been condemned as the dreams of a visionary." The sight of the precious metal placed the discoveries and enterprises of Don Henry beyond the reach of detraction or prejudice. Numerous expeditions were successively fitted out: that of Nuno Tristan, in 1443, who discovered the Arguin Islands, thirty miles to the south-east of Cape Blanco; that of Juan Diaz and others in 1444; that of Gonzalez da Cintra in 1445, who, with seven others, was killed fifty miles south of the Rio del Ouro,-this being the first loss of life on the part of the Portuguese since they had undertaken their explorations. In 1446, a gentleman of Lisbon, by the name of Fernandez, determined to proceed farther to the southward than any other navigator, and accordingly fitted out a vessel under the patronage of the prince. Passing the Senegal River, he stood boldly on till he reached the most western promontory of Africa, to which, from the number of green palms which he found there, he gave the name of Cape Verd. Being alarmed by the breakers with which this shore is lined, he returned to Portugal with the gratifying news of his discovery. In 1447, Nuno Tristan sailed one hundred and eighty miles beyond Cape Verd, and reached the mouth of a river, which he called the Rio Grande, now the Gambia. He was attacked by the natives with volleys of poisoned arrows, of the effects of which all his crew and officers died but four ; and the ship was at last brought home by these four survivors, after wandering two months upon the Atlantic. The next expedition, under Alvaro Fernando, carried out an antidote against the poisoned shafts of the enemy, which successfully combated the venom, as all who were wounded recovered.

The Açores, or Azorcs, were now discovered, about nine

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hundred miles to the west of Portugal; but some doubts exist both as to the discoverer and the date. The ships of. Don Henry had now penetrated within ten degrees of the equator, and the outcry against venturing into a region where the very air was fatal broke out afresh. In this point of view, therefore, the settlement of the Azores was a matter of no little importance. In 1449, King Alphonso gave his uncle, Don Henry, permission to colonize these islands. In 1457, Henry obtained for them several important privileges, the principal of which was the exemption of their inhabitants from any duties upon their commerce in Portuguese and Spanish ports.

In the years 1455-56-57, a Venetian, by the name of Cada-Mosto, undertook, under the patronage of Don Henry, two voyages of discovery along the African coast; but as he did not proceed beyond the Rio Grande, little or nothing was added to maritime discovery. Don Henry died shortly after the return of Cada-Mosto from his second voyage, and for a season this calamity palsied the naval enterprise of his countrymen. Under his auspices the Portuguese had pushed their discoveries from Cape Non to Sierra Leone; from the twenty-ninth to the eighth degree of north latitude.

During the remainder of the reign of Alphonso v. which terminated in 1481—the Portuguese advanced over the coast and Gulf of Guinea and the adjacent islands to the northern boundary of the great kingdom of Congo, and had therefore arrived within six hundred and fifty marine leagues of the cape which forms the southern point of the African continent. They had crossed the equator, and not a man had turned black. They had entered into a brisk gold-trade with the savages of Guinea. John II., the son and successor of Alphonso, determined to fortify a point called Mina, from its abundant mines, and sent out twelve vessels with building materials and six hundred men. The negroes at first resisted, but finally yielded their consent. The fort was constructed and named St. Jorge da Mina; the quarry from which the first stone was taken being the favourite god of the tribe that inhabited the coast.

John II, now added to his other titles that of Lord of Guinea. In the hope of opening a passage by sea to the rich spice-countries of India, he asked the support and countenance of the different states of Christendom. But the established mercantile interest of these countries was naturally hostile to a project which aimed at changing the route of Eastern commerce. John next applied to the Pope for an increase of power, and obtained from his Holiness a grant of all the lands which his navigators should discover in sailing from west to east. The grand idea of sailing from east to west-one which implied a knowledge of the sphericity of the globe-had not yet, to outward appearance, penetrated the brain of either pope or layman. One Christopher Columbus, however, was already brooding over it in secret and in silence.

It had hitherto been customary for Portuguese navigators to erect wooden crosses upon all lands discovered by them. John II. now commanded them to employ stone pillars six feet high, and to inscribe upon them, in the Latin and Portuguese languages, the date, the name of the reigning monarch, and that of the discoverer. Diego Cam was the first to comply with this command ; he set up a column at the mouth of the river Congo, at which he arrived in 1484. An ambassador was sent by the chief of the territory to Portugal, where he embraced Christianity and was baptized by the name of John. The anxiety of the king now increased in reference to interference by other nations : he therefore sent to King Edward, of England, an earnest request that he would prevent the intended voyage to Guinea of two of his subjects, John Tintam and William Fabian, with which request Edward saw fit to comply. The Portuguese monarch now carefully concealed the progress of his navigators upon the African coast, and on all occasions magnified the perils of a Congo voyage. He declared that every quarter of the moon produced a tempest; that the shores were girt with inhospitable rocks; that the inhabitants were cannibals, and that the only vessels which could live in the waters of the torrid zone were caravels of Portuguese build. Suspecting that three sailors who had left Portugal for Spain intended to sell the secret to the foreign king, he ordered them to be pursued and taken. Two were killed, and the third was broken upon the wheel. "Let every man abide in his element," said John; "I am not partial to travelling seamen."

We now approach an era of great achievements. John determined, in 1486, to assist the attempts made on sea by journeys over land. Accordingly, a squadron was fitted out under Bartholomew Diaz, one of the officers of the royal household, while Pedro de Covillam and Alphonso de Payra, both well versed in Arabic, received the following order respecting a land journey :--- "To discover the country of Prester John, the King of Abyssinia, to trace the Venetian commerce in drugs and spices to its source, and to ascertain whether it were possible for ships to sail round the extremity of Africa to India." They went by way of Naples, the island of Rhodes, Alexandria, and Cairo, to Aden in Arabia. Here they separated, Covillam proceeding to Cananor and Goa, upon the Malabar coast of Hindostan, and being the first Portuguese that ever saw India. He went from there to Sofala, on the eastern coast of Africa, and saw the Island of the Moon, now Madagascar. He penetrated to the court of Prester John, the King of Abyssinia, and became so necessary to the happiness of that potentate, that he was compelled to live and die in his dominions. An embassy sent by Prester John to Lisbon made the Portuguese acquainted with Covillam's adventures. Long ere this, however, Bartholomew Diaz had sailed upon the voyage which has immortalized his name. He received the command of a fleet, consisting of two ships of fifty tons each, and of a tender to carry provisions, and set sail towards the end of August 1486, steering directly to the south. It is much to be regretted that so few

details exist in reference to this memorable expedition. We know little more than the fact that the first stone pillar which Diaz erected was placed four hundred miles beyond that of any preceding navigator. Striking out boldly here into the open sea, he resolved to make a wide circuit before returning landward. He did so; and the first land he saw, on again touching the continent, lay one hundred miles to the eastward of the great southern cape, which he had passed without seeing it. Ignorant of this, he still kept on, amazed that the land should now trend to the east and finally to the north. Alarmed, and nearly destitute of provisions, mortified at the failure of his enterprise, Diaz unwillingly put back. What was his joy and surprise when the tremendous and long-sought promontory-the object of the hopes and desires of the Portuguese for seventy-five years, and which, either from the distance or the haze, had before been concealed-now burst upon his view !

Diaz returned to Portugal in December 1487, and in his narrative to the king, stated that he had given to the formidable promontory he had doubled the name of "Cape of Tempests." But the king, animated by the conviction that Portugal would now reap the abundant harvest prepared by this cheering event, thought he could suggest **a** more appropriate appellation. The Portuguese poet, Camoens, thus alludes to this circumstance :—

> " At Lisboa's court they told their dread escape, And from her raging tempests named the Cape. ' Thou southmost point,' the joyful king exclaim'd, ' CAPE OF GOOD HOPE be thou for ever named !'"

Successful and triumphant as was this voyage of Diaz, it eventually tended to injure the interests of Portugal, inasmuch as it withdrew the regards of King John from other plans of discovery, and rendered him inattentive to the efforts of rival powers upon the ocean. It caused him to turn a deaf ear to the proposals of Columbus, who had humbly brought to Lisbon the mighty scheme with which he had been contemptuously repulsed from Genoa.

CHAPTER IV.

COLUMBUS, HIS EARLY LIFE AND EDUCATION—FIRST VOY-AGE—SECOND VOYAGE—THIRD VOYAGE—FOURTH VOY-AGE—AMERIGO VESPUCCI—JOHN AND SEBASTIAN CABOT —VINCENT YANEZ PINZON.

CHRISTOPHER COLUMBUS was born in Genoa in the year 1435. His father was a wool-comber, and Christopher followed for a time the same occupation. He was sent, however, at the age of ten years, to the University of Pavia, where he seems to have studied, though with little advantage, natural philosophy and astronomy, or, as it was then called, astrology. Returning to his father's bench, he worked at wool-combing with his brother Bartholomew till he was fourteen years of age. By this time the natural influence of the situation, the atmosphere, and the traditions of Genoa, had awakened in him the tastes and the ambition of a sailor. The sea had long been the home and the life of the Genoese : it was the theatre of their glory, and their avenue to wealth. Christopher's greatuncle, Colombo, commanded a fleet intrusted to him by the king, and with which he carried on a predatory warfare against the Venetians and Neapolitans. His nephew joined his ship, and thus became acquainted with the whole extent of the Mediterranean, which was at that period ploughed by the pirates of the Archipelago and the corsairs of the Barbary States. As the vessel went armed to the teeth, the young sailor not only learned the art of navigation, but acquired those habits of discipline and subordination, of self-command and presence of mind, which afterwards served him in so good stead. This manner of life lasted for many years, till Columbus, at the age of thirty, was wrecked off the coast of Portugal, and reached with some difficulty the city of Lisbon. Here he found his brother Bartholomew settled, and occupying himself in drawing plans, charts, and maps for the use of navigators. Christopher joined him, and gained a sufficient livelihood by copying manuscripts and black-letter books, and aiding his brother in his avocations. He soon married an Italian lady named Felippa di Perestrello, whose father, now dead, had been governor of the island of Porto Santo, one of the Madeiras. After his marriage he left for Porto Santo, the sterile dowry of his wife, where his first son Diego was born.

We have already seen that the period was one of the greatest excitement and expectancy in regard to maritime discovery. Columbus had long reflected upon the existence of land in the west, upon the sphericity of the earth, and upon the possibility of crossing the Atlantic. He had already conceived the idea of reaching Asia by following the setting sun across the immensity of the waters. When forty years old, and residing at Lisbon, he proposed to the Senate of Genoa to leave the Mediterranean by the Straits of Gibraltar and to proceed to the west, in the sea known as the Ocean, as far as the "lands where spices bloom," and thus circumnavigate the earth. The Genoese, whose maritime knowledge was confined to the Mediterranean, and who had no fancy for adventures upon the ocean, declined listening to the proposition. It would also seem that overtures made by Columbus to the Council of Venice were similarly rejected. For a time, therefore, he abandoned all efforts to further his desires. In 1477, he made a voyage to Iceland, in order to discover whether it was inhabited, and even sailed one hundred leagues beyond it, where, to his astonishment, he found the sea not frozen.

Upon the accession of John II. to the throne of Portugal —a sovereign whom we have already shown to be deeply interested in the progress of the art of navigation—Columbus made known to him his opinions and his plans, assigning

the extension of the gospel as the avowed and final object of the expedition. The subject was referred to a maritime junto and to a high couucil, by both of whom it was re-jected as visionary and absurd. The king was induced, however, by one of his councillors, to equip a caravel and send it on a voyage of discovery upon the route traced out by Columbus, and thus obtain for himself the glory of the expedition, if successful. Columbus was invited to hand into the Government his maps and charts, together with his written views upon the whole subject. This he did, supposing, in his simplicity, that another examination was to be made of the practicability of the venture. The king despatched a caravel, under the command of one of the ablest pilots of his marine, to follow the track indicated. The vessel left, but soon returned, her crew having been appalled at sight of the boundless horizon, and her captain having lost his courage in a storm. Columbus, indignant at this duplicity, secretly left Lisbon and returned home to Genoa. At this period he had the misfortune to lose his wife Felippa, who had shared his confidence in the existence of unknown lands, and whose encouragement had sustained him in his disappointments. This was in the year 1484. He renewed his proposal to the Senate of Genoa, which was again rejected. He now cast his eyes upon the other European powers, among whom the two sovereigns of Spain, Ferdinand of Aragon and Isabella of Castile, seemed to deserve the preference.

Not far from Palos, upon the Spanish coast, and in sight of the ocean, stood, upon a promontory half hidden by pine-trees, a monastery—known as La Rabida—dedicated to the Virgin, and inhabited by Franciscan friars. The Superior, Juan Perez de Marchena, offered an example of fervent piety and of theological erudition, at the same time that he was a skilful mathematician and an ardent practitioner of the exact sciences. He was at once an astronomer, a devotee, and a poet. During the hours of slumber, he often ascended to the summit of the abbey, and, looking out upon the ocean—known as the Sca of Darkness would ask himself if beyond this expanse of waters there was no land yet unclaimed by Christianity. He rejected as fabulous the current idea that a vessel might sail three years to the west without reaching a hospitable shore. The ocean, formidable to others and intelligible to few, was to him the abode of secrets which man was invited to unfold.

One day a traveller rang at the gate and asked for refreshment for himself and his son. Being interrogated as to the object of his journey, he replied that he was on his way to the court of Spain to communicate an important matter to the king and queen. The traveller was Christopher Columbus. How he came to pass by this obscure monastery-which lay altogether off his route-has never been explained. A providential guidance had brought him into the presence of the man the best calculated to comprehend his purpose, in a country where he was totally without friends, and with whose language he was totally unacquainted. A common sympathy drew them together; and Columbus, accepting for a period the hospitality of Marchena, made him the confidant of his views. Thus, while the colleges and universities of Christendom still held the theory that the earth was flat, and that the sea was the path to utter and outer darkness, Columbus and Marchena, filled with a spontaneous and implicit faith, intuitively believed in the sphericity of the globe and the existence of a nameless continent beyond the ocean. In theory they had solved the great question whether the ship which should depart by the west would come back by the east.

Marchena gave Columbus a letter of recommendation to the queen's confessor, and, during his absence, promised to educate and maintain his son Diego. Thus tranquillized in his affections, and aided in his schemes, Columbus departed for Cordova. Here he was destined to undergo another disappointment; for the queen's confessor, his expected patron, treated him as a dreaming speculator and needy adventurer. He soon became again isolated and forgotten. In the midst of his indigence, however, a noble lady, Beatrix Enriquez, young and beautiful, though not rich, noticed his manners and his language, so evidently above his condition, and detained him at Cordova long after his hopes were extinguished. He married her : she bore him a son, Fernando, who afterwards became his father's biographer and historian.

Columbus now wrote to the king a brief and concise letter, setting forth his desires. It was never answered. After a multitude of similar deceptions and disappointments, Geraldini, the ambassador of the Pope, presented him to Mendoza, the Grand Cardinal, through whose influence Columbus obtained an audience of Ferdinand, who appointed a junto of wise men to examine and report upon his scheme. This junto, made up of theologians and not of navigators and geographers, and which sat at Salamanca, opposed Columbus on biblical grounds, declared the theory a dangerous if not heretical innovation, and finally reported unfavourably. This decision was quite in harmony with public opinion in Salamanca, where Columbus was spoken of as "a foreigner-who asserted that the world was round like an orange, and that there were places where the people walked on their heads." Seven years were thus wasted in solicitation, suspense, and disappointment. From time to time Columbus had reason to hope that his proposals would be reconsidered ; but in 1490 the siege of Baza, the last stronghold of the Moors, and in 1491 the marriage of Isabella, the daughter of Ferdinand and Isabella, with Don Alonzo of Portugal, absorbed the attention of their majesties to the exclusion of all scientific pre-occupations. Finally, when the matter was re-opened, and the junto was reassembled, its president, Fernando de Talavera, was instructed to say that the exhaustion of the treasury necessitated the postponement of the whole subject until the close of the war with Grenada. At last, Columbus, reflecting upon the delays, refusals, affronts, and suspicions of which he had been the object, the time he had wasted, and the antechambers in which he had waited the condescension of the great, resolved to shake the dust of Spain from his feet, and return to the abbey of his friend Marchena. He arrived there bearing upon his person the impress of poverty, fatigue, and exhausted patience. Marchena was profoundly annoyed by the reflection that the glory of the future discoveries of Columbus would be thus taken from Spain and conferred upon some rival power. Fearing, however, that he had too readily lent his ear to theories which had been twice rejected as puerile by a competent junto, he sent for an eminent mathematician of Palos, Garcia Hernandez, a physician by profession. They then conferred together upon the subject and pronounced the execution of the project feasible.

Marchena at once wrote an eloquent letter to Queen Isabella, and intrusted it to a pilot whose relations with the court rendered him a safe and reliable messenger. He gave the missive into the hands of the queen, and returned to the monastery the bearer of an invitation to Marchena to repair at once to Santa Fe, where the court then was, engaged in investing Grenada. Columbus borrowed a mule for the friar, who left secretly at midnight and arrived safely at Santa Fe. Isabella received Marchena graciously, and instructed him to summon Columbus, to whom she sent twenty thousand maravedis—about ± 14 —with which to purchase a horse and a proper dress in which to appear before her.

Columbus arrived at Santa Fe just before the surrender of Grenada and the termination of the struggle between the Crescent and the Cross. After the official rejoicings, the queen gave audience to Columbus. As she already believed in the practicability of the scheme, the only subjects to be discussed were the means of execution, and the recompense to be awarded to Columbus in case of success. A committee was appointed to consider this latter point. Columbus fixed his conditions as follows :— He should receive the title of Grand Admiral of the Ocean.

He should be Viceroy and Governor-General of all islands and mainlands he might discover.

He should levy a tax for his own benefit upon all productions—whether spices, fruits, perfumes, gold, silver, pearls, or diamonds—discovered in, or exported from, the lands under his authority.

And his titles should be transmissible in his family, for ever, by the laws of primogeniture.

These conditions were treated with derision by the committee, and Columbus was regarded as an insolent braggart. He would not abate one tittle of his claims, though, after eighteen years of fruitless effort, he now saw all his hopes at the point of being again dashed to earth. He mounted his mule, and departed for Cordova before quitting Spain for ever.

Two friends of the queen now represented the departure of Columbus as an immense and irreparable loss, and, by their supplications and protestations, induced her once more to consider the vast importance of the plans he proposed. Moved by their persuasions, she declared that she accepted the enterprise, not jointly, as the wife of the King of Spain, but independently, as Queen of Castile. As the treasury was depleted by the drains of war, she offered to defray the expenses with her own jewels. A messenger was despatched for Columbus, who was overtaken a few miles from Grenada. He at first hesitated to return ; but, after reflecting upon the heroic determination of Isabella, who thus took the initiative in a perilous undertaking, against the report of the junto, the advice of her councillors, and in spite of the indifference of the king, he obeyed with alacrity, and returned to Santa Fe.

He was received with distinction by the court and with affectionate consideration by the queen. Ferdinand applied his signature to the stipulations, but caused it to be distinctly set down that the whole affair was undertaken by the Queen of Castile at her own risk and peril—thus excluding himself for ever from lot or parcel in this transcendent enterprise.

FIRST VOYAGE OF COLUMBUS.

Columbus received his letters-patent, granting him all the privileges and titles he had demanded, on the 30th of April 1492. His son Diego was made page to the princeroyal—a favour only accorded to children of noble families. The harbour of Palos was chosen as the port of departure ; and its inhabitants, whose annual taxes consisted in furnishing two caravels, armed and manned, to the Government, were instructed to place them within ten days at the orders of Columbus. Persons awaiting trial or condemnation were to have the privilege of escaping verdict and punishment by embarking upon this terrible and perhaps fatal voyage.

The mariners of Palos received these tidings with dismay. Nothing was certainly in those days more calculated to strike with terror the cautious coaster than a voyage upon the boundless endless MARE TENEBROSUM, which, in the imagination not only of the ignorant, but even of the educated, was the home of chaos, if not the seat of Erebus. Upon the maps of the world designed at this period, the words Mare Tenebrosum were surrounded with figures of imps and devils, compared to which the Cyclops, griffins, and centaurs of mythology were modest and benign creations. The Arabians, who were forbidden by the Koran to depict the forms of animals, gave, as they thought, a fitting character to the sea, by representing the hand of Satan upon their charts, ready to clutch and drag beneath the waves all who should be so rash as to brave the displeasure of Bahr-al-Talmet. Besides Satan, besides the Leviathan and Behemoth, and other similar submarine terrors, the adventurer upon the open sea would find adversaries in the air; and if he escaped the blast and the thunderbolt, it would be to fall a victim to the roc, that gigantic bird

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which lifted ships into the air and crunched them in the clouds. This roc, from terrifying the companions of Columbus, has descended to amuse children in the nautical romance of Sinbad the Sailor.

Time passed, and the authorities of Palos had yet furnished nothing towards the voyage. Owners of vessels hid them in distant creeks, and the port became gradually a desert. The court ordered stringent measures, and at last a caravel named the Pinta was seized and laid up for repairs. All the carpenters turned sick, and neither rope, wood, nor tar, was to be found. In vain did Marchena, the zealous Franciscan of Palos, who was beloved by all its inhabitants, undertake a crusade among the seafaring population in favour of the project : the whole Andalusian coast considered it chimerical and a temptation of Providence.

Martin Alonzo Pinzon, one of three brothers, all seamen, and who had at this period lately returned from Rome, where the Pope's librarian had shown him a map bearing the representation of land in the Atlantic to the west, was introduced by Marchena to Columbus. The report soon became current that the brothers, whose credit and influence at Palos were very great, intended to risk the adventure on board of the caravel Nina, belonging to the younger of the three. The mariners took courage, and the city of Palos contributed its second caravel, the Gallega, making three in all. This Gallega, though old and heavy and unfit for the service, was stout and solid, and Columbus chose her for his flag-ship, rebaptizing her, however, the Santa Maria. Towards the end of July the vessels were nearly ready for sea, and Columbus retired for a period to the monastery, where he passed his days in prayer and his nights in contemplation. On one occasion he left the convent and appeared among the workmen : he surprised the sailors, condemned by the city to accompany him to the west, engaged in putting the rudder of the Pinta together in such a manner that the first storm would unship it. Marchena redoubled his exhortations, and at last the expedition was ready. Popular belief has in modern times represented these vessels as much smaller than they probably really were.

The Santa Maria measured about ninety feet at the keel. She had four masts, two of them square-rigged, and two furnished with the lateen-sails of the Mediterranean. She had a deck extending from stem to stern, and a double deck at the poop twenty-six feet long-one-third nearly of her entire length. The double deck was pierced for cannon, the forward deck being armed with smaller pieces, used for throwing stones and grape. From the journal of Columbus, we know that he employed in the manœuvres quite a complicated system of ropes and pulleys. Eight anchors hung over her sides. She represented in her general characteristics a modern vessel of twenty guns. She was manned by sixty-six men, not one of whom was from Palos---one of them being an Englishman and one an Irishman-and was commanded by Columbus.

The Pinta and the Nina were decked only forward and aft, the space in the middle being entirely uncovered. Their armament was equal to that of sloops of sixteen and ten guns respectively. Alonzo Pinzon commanded the Pinta, whose total crew, including the officers, numbered thirty men. The youngest of the three Pinzons, Vincent Yanez, commanded the Nina with twenty-three men. The provisions of the fleet consisted of smoked beef, salt pork, rice, dried peas, and other vegetables, herrings, wine, oil, vinegar, &c., sufficient for a year.

As the day approached and the danger grew more imminent, the apprehension increased, and the sailors expressed a desire to reconcile themselves with Heaven and obtain absolution for their sins. They went in procession to the monastery of La Rabida, with Columbus at their head, and received the eucharist from the hands of the Franciscan Marchena. Columbus, while waiting for the land-breeze, retired for a last time to the convent, to meditate upon the duties before him, and to peruse his favourite book, the Gospel of St. John. At three o'clock in the morning of the 3d of August he was awakened by the murmuring of the long wished-for wind in the tops of the pine trees which bordered his cell. The coming day was Friday, a day inauspicious to sailors, but to him a day of good omen. He arose, summoned Marchena, from whom he received the communion, and then descended on foot the steep declivity which leads to Palos.

The Santa Maria at once sent her boat to receive the admiral, and at the sound of the preparations and the orders of the pilots, the inhabitants awoke and opened wide their windows. Mothers, wives and sisters, fathers and brothers, ran in confusion to the shore, to bid a last farewell to those whom they might perhaps never see again. The royal standard, representing the crucifixion, was hoisted at the main ; and Columbus, standing upon the quarter-deck, gave the order to spread the sails in the name of Jesus Christ. Thus commenced the most memorable venture upon the ocean that man had then made, or has made since.

Columbus commenced his journal at once, and it is from the passages of this narrative which are still extant that we shall derive an account of the voyage. He begins by declaring the object of the expedition to be to extend the blessings of the gospel to nations supposed to be without it. He adds, that he shall write at night the events of the day, and each morning the occurrences of the night. He will mark the lands he shall discover upon the chart, and will banish sleep from his eyelids in order to watch the progress of his vessel.

All went well till Monday, when the helm of the Pinta fell to pieces,—this accident having been a second time prepared by her refractory owners. The fleet made the best of their way to the Canaries, where the Pinta was repaired. They sailed again on the 6th of September, narrowly escaping attack from three Portuguese caravels that King John had sent against Columbus, indignant that he should have transferred to another power the proposal he had once made to himself.

Thus far the route had lain over the beaten track between the continent and the Canaries, along the coast of Africa. As they now launched into the open sea, and as the Peak of Teneriffe sank under the horizon behind them, the heart of Columbus beat high with joy, while the courage of his officers and men died away within them. The Admiral kept two logs, one for himself and one for the crew, the latter scoring a distance less than that which they had really made, and thus keeping them in ignorance of their actual distance from home. His course was to the south-west. The sky, the stars, the horizon, the water, changed visibly as they advanced. Familiar constellations disappeared, others took their place. On the 13th of September Columbus observed a strange and fearful phenomenon. The needle, which till then had been infallible, swerved from the Polar star, and tremblingly diverged to the north-west. The next day this variation was still more marked. Columbus took every precaution to conceal a discovery so discouraging from the fleet, and one which alarmed even him. The water now became more limpid, the climate more bland, and the sky more transparent. There was a delicate haze in the air, and a fragrance peculiar to the sea in the fresh breeze. Aquatic plants, apparently newly detached from the rocks or the bed of the ocean, floated upon the waves. For the first time in the history of the world, the tranquil beauties and the solemn splendours of the tropical Atlantic were passing before the gaze of human beings. According to the journal of Columbus, " Nothing was wanting in the scene except the song of the nightingale to remind him of Andalusia in April."

The proximity of land seemed often to be indicated by the odour with which the winds were laden, by the abundance of marine plants, and the presence of birds. Columbus would not alter his course as he did not wish to abate the confidence of his men in his own belief that land was to be found by steering west. The floating vegetation now became so abundant that it retarded the passage of the vessels. The sailors became seriously alarmed. They thought themselves arrived at the limit of the world, where an element too unstable to trade upon, too dense to sail through, admonished the rash stranger to take warning and return. They feared that the caravels would be involved beyond extrication, and that the monsters lying in wait beneath the floating herbage would make an easy meal of their defenceless crews. The trade-winds, then unknown, were another cause of anxiety; for if they always blew to the westward, as they appeared to do, how could the ships ever return eastward to Europe ? In the midst of the apprehension excited by these causes, which nearly drove the terrified men to mutiny, a contrary wind sprang up, and the revolt was thus providentially quelled. Columbus wrote in his journal, "This opposing wind came very opportunely, for my crew was in great agitation, imagining that no wind ever blew in these regions by which they could return to Spain."

But the terrors of the ignorant men soon broke out afresh. Seaweed and tropical marine plants reappeared in heavy masses, and seemed to shut in the ships among their stagnant growth. The breeze no longer formed billows upon the surface of the waters. The sailors declared that they were in those dismal quarters of the world where the winds lose their impulse and the waters their equilibrium, and that soon fierce aquatic monsters would seize hold of the keels of the ships and keep them prisoners amid the weeds. In the midst of the perplexities to which Columbus was thus exposed, the sea became suddenly agitated, though the wind did not increase. This again cheered the crew into a temporary tranquillity.

At sunset on the 25th, Alonzo Pinzon, rushing excitedly upon the quarter-deck of the Pinta, shouted, "Land! iand! my lord, I was the first to see it!" The sailors of the Nina clambered joyfully into the tops, and Columbus fell upon his knees in thanksgiving. But the morn dissipated the illusion, and the ocean stretched forth its illimitable expanse as before.

The indications of the vicinity of the land had been so often deceitful, that the crew no longer put faith in them. and fell from discouragement into taciturnity, and from taciturnity into insubordination. The discontent was general, and no efforts were made to conceal it. In their mutinous conversations, they spoke contemptuously of Columbus as "the Genoese," as a charlatan and a rogue. Was it just, they said, that one hundred and twenty men should perish by the caprice and obstinacy of one single man, and that man a foreigner and an impostor? If he persisted in proceeding "towards his everlasting west, which went on and on, and never came to an end," he ought to be thrown into the sea and left there. On their return they could easily say that he had fallen into the waves while gazing at the stars. A revolt was agreed upon between the crews of the three ships, who were on several occasions brought into communication by the sending of boats from the one to the other. The captains of the Pinta and the Nina were aware of what was transpiring, but for the time being maintained a cautious neutrality. The sea continued calm as the Guadalquivir at Seville, the air was laden with tropical fragrance, and in twenty-four hours the fleet, apparently at rest, glided imperceptibly over one hundred and eighty This motionless rapidity, as it were, thoroughly miles. terrified the crew, and breaking out into open mutiny, they refused, on the 10th October, to go any farther westward. The Nina and the Pinta rejoined the Santa Maria; the brothers Pinzon, followed by their men, leaped upon her deck, and commanded Columbus to put his ship about and return to Palos.

At this most vital point of the narrative, our authorities are contradictory, while the journal of Columbus himself is silent. According to Oviedo,—a writer who obtained his information from an enemy of Columbus,—the latter yielded to his men so far as to propose a compromise, and to consent to return unless land was discovered in three days' sail. It is certain, at any rate, that the demonstration, which began at night-fall, had ceased long before the morning's dawn.

And now pigeons flew in abundance about the ships, and green canes and reeds floated languidly by. A bush, its branches red with berries, was recovered from the water by the Nina. A tuft of grass and a piece of wood, which appeared to have been cut by some iron instrument, were picked up by the Pinta. Such indications were sufficient to sustain the most dejected. Still the sun sank to rest in a horizon whose pure line was unbroken by land and unsullied by terrestrial vapour. The caravels were called together, and after the usual prayer, Columbus announced to them that their trials were at an end, and that the morrow's light would bring with it the realization of all their hopes. The pilots were instructed to take in sail after midnight, and a velvet pourpoint was promised to him who should first see land. The expectation and impatience which pervaded the three ships were indescribable. No eve was closed that night. The Pinta, being the most rapid sailer, was a long way in advance of the others. Suddenly a flash and a heavy report from the Pinta announced the joyful tidings. A Spaniard of Palos, named Juan Rodriguez Bermejo, had seen the land and won the velvet pourpoint. Columbus fell upon his knees, and raising his hands to heaven, sang the Te Deum Laudamus. The sails were then furled and the fleet lay to. Arms and holiday dresses were prepared, for they knew not what the day would bring forth, whether the land would offer hospitality or challenge to combat. The great mystery of the ocean was to be revealed on the morrow : in the meantime, the night and the darkness had in their keeping the mighty secret-whether the land was a savage desert or a spicy and blooming garden.

On Friday, the 12th of October 1492, the kindling dawn revealed to the wondering eyes of our adventurers the bright colours and early-morning beauties of an island clothed in verdure, and teeming with the fruits and vegetation of mid-autumn in the tropics. An anchorage was easily found, and Columbus, dressed in official costume, and bearing the royal standard in his hand, landed upon the silent and deserted shore. He planted the standard, and, prostrating himself before it, kissed the earth he had discovered. He drew his sword, and, naming the land San Salvador, in memory of the Saviour, took possession of it for the Crown of Castile. The crews recognised Columbus as Admiral of the Ocean and Viceroy of the Indies. The most mutinous and outrageous thronged closely about him, and crouched at the feet of one who, in their eyes, had already wealth and honours in his gift.

The island at which Columbus had landed was called by the natives Guanahani, and is now one of the archipelago of the Bahamas. The inhabitants had retreated to the woods at the arrival of the strangers ; but, being gradually reassured, suffered their confidence to be won, and received from them fragments of glass and earthenware as presents possessing a supernatural virtue. Columbus took seven of them on board, being anxious to convey them to Spain and offer them to the king, promising however to return them. Then he weighed anchor and explored the wonderful region in which these lovely islands lie. New lands were constantly, as it were, rising from the waves; the eye could hardly number them, but the seven natives called over a hundred of them by name. He landed successively at Concepcion, la Fernandine, and Isabella. He sought everywhere for traces of gold in the soil, for he hoped thus to interest Spain in a continuance of his explorations. At last, the natives spoke of a large and marvellous land, called Cuba, where there were spices, gold, ships, and merchants. Supposing this to be the wonderful Cipango, described by Marco Polo, he set sail at once. It was now the 24th of October.

On the 28th, at dawn, Columbus discovered an island,

which, in its extent and in its general characteristics, reminded him strongly of Sicily, in the Mediterranean. He no longer doubted that this beautiful spot was the real Cipango. He landed, gave to the island the name of Juana, and commenced a search for gold, which resulted in a complete disappointment. On leaving Cuba, he gave it a name which he thought more appropriate than Juana, styling its eastern extremity Alpha and Omega, being, as he thought, the region where the East Indies finished and where the West Indies began. This error of Columbus was the cause of the North American savages being called Indians—an error which has been perpetuated in spite of the progress of geographical discovery, and which will doubtless endure for ever.

On the 6th of December he discovered an island, named Haiti by the natives, and which he called Hispaniola, as it reminded him of the fairest tracts of Spain. He found that the inhabitants had the reputation with their neighbours of devouring human flesh; they were called Caniba people, an epithet which, after the necessary modifications. has passed into all European languages. The Caribs were the nation meant. At this point, the captain of the Pinta deserted the fleet, in order to make discoveries on his own account. Soon after the Santa Maria was wrecked upon the coast of Haiti, and Columbus, thinking that this accident was intended as an indication of the Divine will that he should establish a colony there, built a fort of live timber, in which he placed forty-two men. He weighed anchor in the Nina on the 11th of January 1493, and shortly after fell in with the Pinta. He pretended to believe and 'accept the falsehoods and contradictions which Pinzon alleged as the reasons for his abandonment of the fleet.

No event of moment happened until the 12th of February, a month afterwårds, when a terrible storm burst over the hitherto tranquil waters. Its violence increased to such a degree that the admiral, fearing his discovery

would perish with him, withdrew to his cabin, during the fiercest period of the tumult, and wrote upon parchment two separate and concise narratives of his discoveries. He enclosed them both in wax, and, placing one in an empty barrel, threw it into the sea. The other, similarly enclosed, he attached to the poop of the Nina, intending to cut it loose at the moment of going down. Happily the storm subsided; and on the 17th the shattered vessels arrived at the southernmost island of the Azores, belonging to the King of Portugal. Here half the crew went in procession to the chapel to discharge their vow ; and while Columbus was waiting to go with the other half, the Portuguese made a sally, surrounded the first portion, and made them prisoners. After a useless protest Columbus departed with the men that remained, having with him, in the Nina, but three able-bodied seamen. Another storm now threw him upon the coast of Portugal, at the mouth of the Tagus. Here he narrowly escaped shipwreck a second time, but, with the assistance of the wonder-stricken inhabitants, reached in safety the roads of Rostello. The king, though jealous of the maritime renown he was acquiring for Spain, received him with distinction and dismissed him with presents. Columbus arrived in the Nina at Palos, on Friday, the 15th of March, seven months and twelve days after his departure. Alonzo Pinzon had already arrived in the Pinta, and, believing Columbus to have perished in the storm, had written to the court, narrating the discoveries made by the fleet, and claiming for himself the merit and the recompense.

It is not our province to relate the history of the career of Columbus upon land. We simply mention the week he spent with Marchena; the princely honours he received in his progress to Barcelona, whither the court had gone; and his reception by the king and queen, in which Ferdinand and Isabella rose as he approached, raised him as he kueeled to kiss their hands, and ordered him to be seated in their presence.

SECOND VOYAGE OF COLUMBUS.

The Spanish sovereigns soon fitted out a new expedition ; and, on the 25th of September 1493, Columbus left the port of Cadiz with seventeen vessels, five hundred sailors, soldiers, citizens, and servants, and one thousand colonists, three hundred of whom had smuggled themselves on board. He sailed directly for the Carib or Cannibal Islands, and on the 3d of November arrived in their midst. He named one of them Maria-Galanta, from his flag-ship; another Guadeloupe, from one of the shrines of Spain where he had discharged a vow. He here found numerous and disgusting evidences of the truth of the story that these people lived on human flesh. The island which he named Montserrat, in honour of the famous sanctuary of that name, had been depopulated by the Caribs. He gave to the next land the name of Santa Maria l'Antigoa ; it is now known as Antigoa simply. Another he called Santa Cruz, in honour of the cross. Returning to Hispaniola, he found the fort destroyed and the garrison massacred. Having founded the city of Isabella upon another part of the island, he sent back twelve of his ships to Spain, and with three of the remaining five, one of which was the famous Nina, started upon a voyage of discovery in the surrounding waters. He touched at Alpha and Omega, and inquired of the savages where he could find gold. They pointed to Two days afterwards Columbus descried lofty the south. mountains, with blue summits, upon an island to which he gave the name of Jamaica, in honour of St. James. Then returning to Cuba, and following the southern coast a distance sufficient to convince the three crews that it was a continent and not an island, he took possession of it as such. He then wished to revisit the Caribbean Islands and destroy the boats of the inhabitants, that they might no longer prev upon their neighbours, but the direction of the winds would not permit him to sail to the west. Returning to Isabella, he met his brother Bartholomew, who

had just arrived from Spain, bearing a letter from the queen. He also found, to his extreme regret, that the officers he had left in charge of the colony had transcended their authority and had abandoned their duties. Margarit, the commander, and Boil, the vicar, had departed in the ship that had brought Bartholomew. Overcome by the toils and privations he had undergone, and sick at heart at the sight of the disasters under which the colony was labouring, he fell into a deep lethargy, and for a long time it was doubtful whether he would ever awake again.

He did awake, however, but only to a poignant consciousness of the miseries the Spanish invasion had brought upon the island. The Spaniards and Indians had become. through the treachery of the former, hostile during his absence, and battles, surprises, and murders were of daily occurrence. Seeing the necessity of a vigorous effort in order to maintain his authority over the natives, he led his two hundred and twenty men against a furious throng of naked, painted savages, whose numbers were declared by the Spaniards to be no less than one hundred thousand. The Indians were defeated with great slaughter, and were subjected to the payment of tribute and to the indignity of taxation. At this period an officer, named Juan Aguada, sent out by Ferdinaud and Isabella upon the malicious representations of Margarit and Father Boil, to inquire into the state of the colony and the conduct of Columbus, arrived in the island. Columbus determined to return himself to Spain to present in person a justification of his course. A violent storm having destroyed all the vessels except the Nina, Columbus took the command of her, Aguado building a caravel for himself from the wrecks of the others. They both left Isabella on the 10th of March 1496, taking with them the sick and disappointed, to the number of two hundred and twenty-five, and thirty-two Indians, whom they forced to accompany them. They touched at Guadeloupe for wood and water, and, after repulsing an attack of Caribs, contrived to gain their confidence, and to obtain the articles of which they stood in need. They left again on the 20th of April. After a long and painful voyage, in the course of which it was proposed to throw the Indians overboard in order to lessen the consumption of food, they arrived, without material damage, at the port of Cadiz. Columbus wrote to the king and queen, and during the month that elapsed before their answer was received, allowed his beard to grow, and, disgusted with the world, assumed the garments and the badges of a Franciscan friar. He was soon summoned to Burgos, then the residence of the court, where Isabella, forgetting the calumnies of which he had been the object and the accusations his enemies had heaped upon him, loaded him with favours and kindness.

THIRD VOYAGE OF COLUMBUS.

Numerous circumstances prevented Columbus from requesting the immediate equipment of another expedition. It was not till the 30th of May 1498, that he sailed again for his discoveries in the West. He left San Lucar with six caravels, three laden with supplies and reinforcements for the colony at Isabella, and three intended to accompany himself upon a search for the mainland, which he believed to exist west of Hispaniola, Cuba, and Jamaica. On the 15th of July, in the latitude of Sierra Leone, they came into the region of calms, where the water seemed like molten silver beneath a tropical sun. Not a breath of air stirred, not a cloud intercepted the fiery rays which fell vertically upon them from the skies. The provisions decayed in the hold, the pitch and tar boiled upon the ropes. The barrels of wine and water opened in wide seams, and scattered their precious contents to waste. The grains of wheat were wrinkled and shrivelled as if roasting before the fire. For eight days this incandescence lasted, till an east wind sprang up and wafted them to a more temperate spot in the torrid zone.

On the 31st of July land was discovered in the west-

three mountain peaks seeming to ascend from one and the same base. Columbus had made a vow to give the name of the Trinity to the first land he should discover, and this singular triune form of the land now before them was noticed as a wonderful coincidence by all on board. It was named, therefore, Trinidad ; it lies off the northern coast of Venezuela, in the continent of South America. The innumerable islands, formed by the forty mouths of the Orinoco, were next discovered, and shortly afterwards the continent to the north, which Columbus judged to be the mainland from the volume of water brought to the sea by the Orinoco. Columbus was not the first to set foot upon the New World he had discovered : being confined to his cabin by an attack of ophthalmia, he sent Pedro de Terreros to take possession in his stead. This discovery of the southern portion of the western continent was, however, as we shall soon have occasion to show, subsequent to that of the northern portion by John Cabot, who visited Labrador in 1497.

The fleet was unable to remain in these seductive regions, owing to the scarcity of provisions and the increasing blindness of the admiral. He would have been glad to stay in a spot which, in his letter to his sovereigns, he describes as the Terrestrial Paradise, the Orinoco being one of the four streams flowing from it, as described in the Bible. The fact that this river throws from its forty issues fresh water enough to overcome the saltness of the sea to a great distance from the shore, was one of the circumstances which gave to this portion of the world the somewhat marvellous and fantastic character with which the imagination of Columbus invested it. He sailed at once from the continent to Hispaniola, discovering and naming the islands of Assumption and la Margarita. At Hispaniola he again found famine, distress, rebellion, and panic on every side. Malversation and mutiny had brought the colony to the very verge of ruin.

We have not space to detail the manœuvres and machina-

tions by which the mind of Ferdinand was prejudiced towards Columbus, and in consequence of which, Francesco Bobadilla was sent by him in July 1500 to investigate the charges brought against the admiral. Arrogant in his newly-acquired honours. Bobadilla took the part of the malcontents, and, placing Columbus in chains, sent him back to Spain. He arrived at Cadiz on the 20th of November, after the most rapid passage yet made across the ocean. The general burst of indignation at the shocking spectacle of Columbus in fetters, compelled Ferdinand to disclaim all knowledge of the transaction. Isabella accorded him a private audience, in which she shed tears at the sufferings and indignities he had undergone. The king kept him waiting nine months, wasting his time in fruitless applications for redress, and finally appointed Nicholas Ovando governor of Hispaniola in his place.

FOURTH VOYAGE OF COLUMBUS.

Columbus was now advanced in years, and his sufferings and labours had dimmed his eyesight and bowed his frame; but his mind was yet active, and his enthusiasm in the cause of discovery irrepressible. He had convinced himself, and now sought to convince the queen, that to the westward of the regions he had visited the land converged. leaving a narrow passage through which he hoped to pass, and proceed to the Indies beyond. This convergence of the land did in reality exist, but the strait of water he expected to find was, and is, a strait of land-the Isthmus of Panama. However, the queen approved of the plan, and gave him four ships, equipped and victualled for two years. Columbus had conceived the immense idea of passing through the strait, and returning by Asia and the Cape of Good Hope, thus circumnavigating the globe and proving its spherical form. He departed from Cadiz on the 8th of May 1502.

He touched at and named Martinique early in June, and afterwards at St. Jean, now Porto Ricco. Ovando refused his request to land at Isabella to repair his vessel, and exchange one of them for a faster sailer. Escaping a terrible storm, which wrecked and utterly destroyed the splendid fleet in which the rapacious pillagers of the island had embarked their ill-gotten wealth, he was driven by the winds to Jamaica, and thence by the currents to Cuba. Here a strong north wind enabled him to sail south-southwest, towards the latitude where he expected to find the strait. He touched the mainland of North America at Truxillo, in Honduras, and coasted thence southward along the Mosquito shore, Nicaragua, Costa Rica, and Panama. Here he explored every sinuosity and indentation of the shore, seeking, at the very spot where civilisation and commerce now require a canal, a passage which he considered as demanded by nature and accorded by Providence. He followed the isthmus as far as the Gulf of Darien, and then, driven by a furious tropical tempest, returned as far as Veragua, in search of rich gold mines of which he had heard. The storm lasted for eight days, concluding with a terrible display of waterspouts, which Columbus is said to have regarded as a work of the devil, and to have dispelled by bringing forth the Bible and exorcising the demon. One of the waterspouts passed between the ships without injuring them, and spun away, muttering and terrible, to spend its fury elsewhere.

On reaching Veragua, Columbus sent his brother up a river, which he called Bethlehem, or by contraction Belem, to seek for gold. His researches seeming to indicate the presence of the precious metal, Columbus determined to establish a colony upon the river, an attempt which was defeated by the hostility of the natives. Their fierce resistance and the crazy state of his vessels forced Columbus, in April 1503, to make the best of his way to Hispaniola with two crowded vessels, which, being totally unseaworthy, he was obliged to run ashore at Jamaica. There Columbus awed the natives and subdued them to obedience and submission, by predicting an eclipse of the moon.

Thus left without a single vessel, he had no resource but to send to Hispaniola for assistance. After a period of fifteen months, lost in quelling mutinies and in opposing the cruelties and exactions of the new masters of the island, he obtained a caravel, and again sailed for Spain on the 12th of September 1504. During the passage he was compelled, by a severe attack of rheumatism, to remain confined to his cabin. His tempest-tossed and shattered bark at last cast anchor in the harbour of San Lucar. He proceeded to Seville, where he heard with dismay of the illness and then of the death of his patroness Isabella. Sickness now detained him at Seville till the spring of 1505, when he arrived exhausted and paralytic before the king. Here he underwent another courtly denial of redress. He was now without shelter and without hope. He was compelled to borrow money with which to pay for a shabby room at a miserable inn. He lingered for a year in poverty and neglect, and died at last in Valladolid on the 20th of May 1506. The ingratitude of Ferdinand of Spain thus caused the death in rags, in destitution, and in infirmity, of the greatest man that has ever served the cause of progress or laboured in the paths of science.

The agitation of the life of Columbus followed his remains to the grave,-for he was buried four successive times, and his dead body made the passage of the Atlantic. Tt. was first deposited in the vaults of the Franciscan Convent of Valladolid, where it remained seven years. In 1513, Ferdinand, now old, and perhaps repentant, caused the coffin to be brought from Valladolid to Seville, where a solemn service was said over it in the grand cathedral. Tt was then placed in the chapel belonging to the Chartreux. In 1536 the coffin was transported to the city of St. Domingo, in the island of Hispaniola. Here it remained for two hundred and sixty years. In 1795 Spain ceded the island to France, stipulating that the ashes of Columbus should be transferred to Spanish soil. In December of the same year the vault was opened, and the fragments which

were found—a leaden coffin, mingled with bones and dust returned to dust—were carefully collected. They were taken to Havana, where, in the midst of imposing ceremonies, they were consigned to their fourth and final resting-place.

We may here refer to that signal instance of public ingratitude and national forgetfulness which is universally regretted, yet will never be repaired,—the giving to the New World the name of America and not that of Columbia —a substitution due to an obscure and ignorant French publisher of St. Dić, in Lorraine.

· Amerigo Vespucci, born at Florence fifteen years after Columbus, and the third son of a notary, appears to have been led by mercantile tastes to Spain in 1486, where he became a factor in a wealthy house at Seville. He abandoned the counter, however, for navigation and mathematics, and took to the sea for a livelihood. He was at first a practical astronomer, and finally a pilot-major. He went four times on expeditions to the New World in 1499, 1500, 1501, 1502. During the first, he coasted along the land at the mouths of the Orinoco, which had been discovered by Columbus the preceding year. Even had he been the first to discover the mainland,-which he was not,-there would have been no merit in it, for he was merely a subordinate officer on board a ship following in the track of Columbus, seven years after the latter had traced it upon the ocean and the charts of the marine. He published an account of his voyage. But it does not appear that he ever claimed honour as the first discoverer, and the friendly relations he maintained with the family of Columbus after the death of the latter show that they did not consider him as attempting to obtain a distinction which did not belong to him. The error flowed from another and more distant source.

Columbus had died in 1506, and had been forgotten. In 1507 a Frenchman of St. Dié republished Vespucci's narrative, substituting the date of 1497 for that of 1499, —thus making it appear that Vespucci had preceded, instead of followed, Columbus in his discovery of the mainland. He did not once mention Columbus, and attributed the whole merit of the western voyages to Vespucci. He added that he did not see why from the name of Amerigo an appellation could not be derived for the continent he had discovered, and proposed that of America, as having a feminine termination like that of Europa, Asia, and Africa, and as possessing a musical sound likely to catch the public ear. This work was dedicated to the Emperor Maximilian, and passed rapidly through editions in various languages.

It will be proper to add to this view of the voyages of Columbus a brief account of those effected immediately afterwards by John and Sebastian Cabot, and by Vincent Yanez Pinzon.

In the year 1496 Henry VII. of England, stimulated by the success of Columbus, granted a patent to one Giovanni Gabotto, a Venetian dwelling in Bristol, to go in search of unknown lands. Little is known of this person, whose name has been anglicized into John Cabot, except that he was a wealthy and intelligent merchant, and fond of maritime discovery. He had three sons, one of whom, named Sebastian, was nineteen years old at the time of the voyage, upon which, with his brothers, he accompanied his father. They sailed in a ship named the Matthew, and on the 24th of June 1497, discovered the mainland of America, eighteen months before Columbus set foot upon it at the mouths of the Orinoco. For a long time it was supposed that Cabot had landed upon Newfoundland, but it is now considered settled that Labrador was the portion of the continent first discovered by a European. No account of the further prosecution of the voyage has reached us, and the only official record of Cabot's return is an entry in the privy-purse expenses of Henry, 10th August 1497 :--- "To hym that found the New Isle, £10." Thus, fifty days had not elapsed between the discovery and its recompense in England,—a fact which shows that Cabot returned home at once. He is supposed to have died about the year 1499.

Sebastian Cabot, the second son, who is regarded as by far the most scientific navigator of this family of seamen, appears to have lived in complete obscurity during the following twelve years. Disgusted, however, by the want of consideration of the English authorities towards him, he accepted an invitation from King Ferdinand to visit Spain in 1512. Here, for several years, he was employed in revising maps and charts, and, with the title of Captain and a liberal salary, held the honourable position of Member of the Council of the Indies. The death of Ferdinand, and the intrigues of the enemies of Columbus, induced him to return to England in 1517. He was employed by Henry VIII., in connexion with one Sir Thomas Perte, to make an attempt at a north-west passage. On this voyage he is said to have gained Hudson's Bay, and to have given English names to sundry places there. So few details of the expedition have been preserved, that the latitude reached $(67\frac{1}{2}$ degrees) is referred by different authorities both to the north and the south.

Vincent Yanez Pinzon, the youngest of the three brothers who had accompanied Columbus upon his first voyage, determined, upon hearing, in 1499, that the continent was discovered, on trying his fortunes at the head of an expedition, instead of in a subordinate position. He found no difficulty in equipping four caravels, and in inducing several of those who had seen the coast of Paria to embark with him as pilots. He sailed from Palos in December 1499, and proceeded directly to the south-west. During a storm which obscured the heavens he crossed the equator, and on the disappearance of the clouds no longer recognised the constellations, changed as they were from those of the Northern to those of the Southern hemisphere. Pinzon was thus the first European who crossed the line in the Atlantic. Sailing to the north, he followed the coast for four hundred leagues, and then returned to Palos, carrying with him three thousand pounds' weight of dye-woods and the first opossum ever seen in Europe.

CHAPTER V.

PORTUGUESE NAVIGATION UNDER EMMANUEL—VASCO DA GAMA—PEDRO ALVAREZ CABRAL—ALPHONZO D'ALBU-QUERQUE—FRANCESCO ALMEIDA—TRISTAN D'ACUNHA— FALL OF THE PORTUGUESE EMPIRE.

In the year 1495, John II. of Portugal was succeeded by his cousin Emmanuel, into whose mind he had a short time before his death instilled a portion of his own zeal for maritime discovery and commercial supremacy. He had especially dwelt upon the necessity of continuing the progress of African research beyond the point which Bartholomew Diaz had lately reached, into the regions where lay the East Indies with their wealth and marvellous productions, and thus substituting for the tedious land-route a more expeditious track by sea. Upon his accession Emmanuel found that a strong opposition existed to the extension of Portuguese commerce and discovery. Arguments were urged against it in his own councils, and had a marked effect upon the public mind by heightening the danger of the intended voyage.

Never was any expedition, whether by land or water, so unpopular as this of King Emmanuel. The murmurs of the cabinet were re-echoed by the populace, who were wrought upon to such an extent that they believed the natural consequence of an invasion of the Indian seas would be the arrival in the Tagus of the wroth and avenging Sultan of Egypt. But Emmanuel discerned prospects of national advantage in the scheme, and determined to pursue it to a prosperous issue.

King John, before his death, and shortly after the return of Diaz, had ordered timber to be purchased for the con-78 struction of ships fit to cope with the storms of the redoubtable Cape. Emmanuel now sought a capable commander, and, after much deliberation, fixed upon a gentleman of his own household, Vasco da Gama by name, a native of the seaport of Sines, and already favourably known for enterprise and naval skill. We are told that "he was formed for the service for which he was called,—violent indeed in his temper, terrible in anger, and sudden in the execution of justice, but at the same time intrepid, persevering, patient in difficulties, fertile in expedients, and superior to all discouragement. He devoted himself to death if he should not succeed, and this from a sense of religion and loyalty."

The fleet equipped for Da Gama's voyage consisted of three ships and a caravel,-the San Gabriel, of one hundred and twenty tons, commanded by Da Gama, and piloted by Pero Dalemquer, who had been pilot to Bartholomew Diaz ; the San Rafael, of one hundred tons, commanded by Paulo da Gama, the admiral's brother ; a store-ship of two hundred tons; and the catavel, of fifty tons, commanded by Nicolao Coelho. Besides these, Diaz, who had already been over the route, was ordered to accompany Da Gama as far The crews numbered in all one hundred and as the Mina. sixty men, among whom were ten malefactors condemned to death, and who had consequently nothing to hope for in Portugal. Their duty in the fleet was to go ashore upon savage coasts and attempt to open intercourse with the natives. In case of rendering essential service, and escaping with their lives, their sentence was to be remitted.

The admiral had fixed upon the Cape Verd Islands as the first place of rendezvous in case of separation by storm. They all arrived safely in eight days at the Canaries, but were here driven widely apart by a tempest at night. The three captains subsequently joined each other, but could not find the admiral. They therefore made for the appointed rendezvous, where, to their great satisfaction, they found Da Gama already arrived; " and, saluting him with many shots of ordnance, and with sound of trumpets, they spake unto him, each of them heartily rejoicing and thanking God for their safe meeting and good fortune in this their first brunt of danger and of peril." Diaz here took leave of them and returned to Portugal. Then, on the 3d of August, they set sail finally for the Cape of Good Hope.

They continued without seeing land during the months of August, September, and October, greatly distressed by foul weather, or, in the quaint language of those days, "by torments of wind and rain." At last, on the 7th of November, they touched the African coast, and anchored in a capacious bay, which they called the Bay of St. Helena, and which is not far to the north of the Cape. Here they perceived the natives "to be lyttle men, ill-favoured in the face, and of colour blacke ; and when they did speake, it was in such manner as though they did alwayes sigh."

Trade was now commenced between Da Gama and the natives, and, by means of signs and gestures, cloth, beads, bells, and glass were bartered for articles of food and other necessaries. But this friendly intercourse was soon interrupted by an act of imprudent folly on the part of a young man of the squadron. Being invited to dine by a party of the natives, he entered one of their huts to partake of the repast. Being disgusted at the viands, which consisted of a sea-calf dressed after the manner of the Hottentots, he fled in dismay. He was followed by his perplexed entertainers, who were anxious to learn how they had offended him. Taking their officious hospitality for impertinent aggression, he shouted for help; and it was not long before mutual apprehension brought on open hostilities. Da Gama and his officers were attacked while taking the altitude of the sun with an astrolabe, by a party of concealed negroes armed with spears pointed with horn. The admiral was wounded in the foot, and with some difficulty effected a retreat to the ships. He left the Bay of St. Helena on the 16th of November.

He now met with a sudden and violent change of weather, and the Portuguese historians have left animated

descriptions of the storm which ensued. During any momentary pause in the elemental warfare, the sailors, worn out with fatigue and yielding to despair, surrounded Da Gama, begging that he would not devote himself and them to a fate so dreadful. They declared that the gale could no longer be weathered, and that every one must be buried in the waves if they continued to proceed. The admiral's firmness remained unshaken, and a conspiracy was soon formed against him. He was informed in time of this desperate plot by his brother Paulo. He put the ringleaders and pilots in irons, and, assisted by his brother and those who remained faithful to their duty, stood night and day to the helm. At length, on Wednesday, the 20th of November, the whole squadron doubled the tremendous promontory. The mutineers were pardoned and released from their manacles.

Da Gama landed some two hundred miles beyond the Cape, and, discharging the victualling ship of her stores, ordered her to be burned as the king had directed. He then entered into commercial relations with the natives, and exchanged red night-caps for ivory bracelets. "Then came two hundred blacke men, some lyttle, some great, bringing with them twelve oxen and four sheep ; and as our men went upon shore they began to play upon four flutes, according with four sundry voices, the music whereof sounded very well. Which the generall hearing, commanded the trumpets to sound, and so they danced with our men. In this pastime and feasting, and in buying their oxen and sheep, the day passed over." Da Gama had reason before long to suspect treachery, however, and withdrew his men and re-embarked. It was in this place that a man falling overboard, and swimming for a long time before the accident was observed, was followed by an albatross, who hovered in the air just above him, waiting the propitious moment when he could make a quiet meal upon him. The man was subsequently rescued, and the albatross disappointed.

Da Gama now passed the rock de la Cruz, where Diaz

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had erected his last pillar, and by the aid of a brisk wind escaped the dangers of the currents and shoals. Losing sight of land, he recovered it again on Christmas-day, and in consequence named the spot Tierra da Natal,-a name which it still preserves. From this point his course was nearly north, along the eastern coast of the continent. Farther on he landed two of his malefactors, with instructions to inform themselves of the character and customs of the inhabitants, promising to call for them on his return. On the 11th January 1498, he anchored off a portion of the coast occupied by people who seemed peaceably and honestly disposed. They were, in fact, Caffres,-the fleet having passed the territory of the Hottentots. After two days spent in the exchange of civilities of the most courteous nature, the ships proceeded on their way, Da Gama naming the country Tierra da Boa Gete-Land of Good People.

He next found at the mouth of a large river a tribe who seemed to have made greater progress in civilisation than their neighbours. They had barks with sails made of palmleaves,—the only indication of any knowledge of navigation the Portuguese had yet met with upon the African coast. As far as could be gathered from their Pantomine, they had come from a distance where they had seen vessels as large as the San Gabriel, whence Da Gama conjectured that the Indies were not far off. He gave to the river the name of *Rio dos bos Sinaes*, or River of Good Promise. The crew suffered greatly here from the effects of scurvy,—many of them dying of the disease and others succumbing under the consequences of amputation. The ships were careened and repaired : thirty-two days being spent in this labour.

The fleet left the River of Good Promise on the 24th of February, and not long after discovered two groups of islands. Near the coast of one of these they were followed by eight canoes, manned by persons of fine stature, less black than the Hottentots, and dressed in cotton cloth of various colours. Upon their heads they wore turbans wrought with silk and gold thread. They were armed with swords and daggers like the Moors, and carried musical instruments which they called sagbuts. They came on board as if they had known the strangers before, and spoke in the Arabic tongue, repelling with disdain the supposition that they were Moors. They said that their island was called Mozambique; that they traded with the Moors of the Indies in spices, pearls, rubies, silver, and linen, and offered to take the ships into their harbour. The bar permitting their passage, they anchored at two crossbow-shots from the town. This was built of wood and thatch,-the mosques alone being constructed of stone. It was occupied principally by Moors, the rest of the island being inhabited by the natives, who were the same as those of the mainland opposite. The Moors traded with the Indies and with the African Sofala in ships without decks, and built without the use of sails, the planks being bound together by cocoa fibres, and the sails being made of palm-leaves. They had compasses and charts.

The Moorish governor of Mozambique and the other Moors supposed the Portuguese to be Turks, on account of the whiteness of their skin. They sent them provisions, in return for which Da Gama sent the shah a quantity of red caps, coral, copper vessels, and bells. The shah set no value upon these articles, and inquired disdainfully why the captain had not sent him scarlet cloth. He afterwards went on board the flag-ship, where he was received with hospitality, though not without secret preparations against treachery. The Portuguese learned from him that he governed the island as the deputy of the King of Quiloa; that Prestor John lived and ruled a long distance towards the interior of the mainland; that Calicut, whither Da Gama was bound, was two thousand miles to the north-east. but that he could not proceed thither without the guidance of pilots familiar with the navigation. He promised to furnish him with two. Discovering subsequently, however, that the strangers were Christians, the shah contrived a plot for their destruction. The vessels escaped, but with only one pilot, whose treachery throughout the voyage was a source

of constant annoyance and peril. On departing Da Gama gave the traitors a broadside, which did considerable damage to their village of thatch.

On the 1st of April Da Gama gave to an island which he discovered the narve of Acoutado, in commemoration of a sound flagillation which was there administered to the pilot for telling him it formed part of the continent,—upon which he confessed that his purpose in thus misrepresenting the case was to wreck and destroy the ships. On the 7th they came to a large island of Mombassa, where they found rice, millet, poultry, and fat cattle, and sheep without tails. The houses were built of stone and mortar, and the city was defended by a small fort almost even with the water.

The King of Mombassa, however, was as great a rogue as the Shah of Mozambique, from whom he had heard, by overland communication, of what had happened in his island. During the night following a grand interchange of civilities and of protestations, Da Gama was informed that a sea-monster was devouring the cable. It turned out that a number of Moors were endeavouring to cut it, that the ship might be driven ashore. Anxious to guit this inhospitable coast, the fleet profited by the first wind to continue their course to the north. They captured a zambuco, or pinnace, from which they took seventeen Moors and a considerable quantity of silver and gold. On the same day they arrived off the town of Melinda, situated three degrees only to the south of the equator. The chief of the captured zambuco offered to procure Da Gama a pilot to take the fleet to Calicut, if he would permit him to go ashore. He was landed upon a beach opposite the city. The chief performed his promise, and induced the king to treat the strangers with courtesy and respect.

During the interview which followed, the King of Melinda remarked that he had never seen any men who pleased him so much as the Portuguese, a compliment which Da Gama acknowledged by setting at liberty the sixteen Moors of the captured pinnace. The king sent

the promised pilot on his return; he proved to be as deeply skilled in the art of navigation as any of the pilots of Europe. He was acquainted with the astrolabe, compass, and quadrant. The fleet set sail from Melinda on the 24th of April. As they had now gone far enough towards the north, and as India lay nearly east, they bade farewell to the coast and struck into the open sea, or rather a wide gulf of the Indian Ocean, seven hundred and fifty leagues across. A few days after, having crossed the line, the crew were delighted to behold again the stars and constellations of the Northern hemisphere. The voyage was rapid and fortunate; for in twenty-three days they arrived off the Malabar coast, and, after a day or two of southing, discovered the lofty hills which overhang the city of Calicut. Da Gama amply rewarded the pilot, released the malefactors from their fetters, and summoned the crew to praver. The route by sea had been discovered from the Tagus to the Ganges : Da Gama had laid out the way from Belem to Golconda.

Some two hundred years before this time, the Malabar coast of Hindostan was united under one single native prince, named Perimal, whose capital was in the interior. It was at this period that the Arabians discover d India. Perimal embraced the Mohammedan religion, and resolved to make a pilgrimage to Mecca and to finish his days there. He intrusted the government to other hands, and embarked for Arabia from the spot where Calicut now stands. The Arabians were led by this circumstance to regard Calicut with peculiar veneration, and by degrees abandoned the former capital : it was thus that Calicut gradually became the great spice and silk market of the East.

In the time of Vasco da Gama, India Proper, or Hindostan, was divided into several independent kingdoms, such as Moultan, Delhi, Bengal, Orissa, Guzarate or Cambaia, Deccan, Canara, Bisnagar, and Malabar. The divisions of Farther India were Ava, Branna, Pegu, Siam, Cambodia,

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Cochin-China, and Tonkin. The Portuguese fleet had arrived upon the coast of Malabar, which is the edge of south-western promontory of Hindostan. It was here, and upon the western coast generally, that the Portuguese were now enabled to plant establishments and to form treaties of alliance and commerce.

The Moors of Arabia were alarmed at seeing Europeans arrive by sea at the scene of a trade of which they had hitherto held the exclusive monopoly. They succeeded in throwing obstacles in the way of the Portuguese admiral, and in poisoning the ear of the Indian zamorin, or king, against him. They even laid a plot for the destruction of the fleet and all on board, that no one might return to Europe to tell of the new route to the Indies. The native monarch was induced by them to testify dissatisfaction with the presents Da Gama had brought, and to ask for the golden statue of the Virgin that ornamented the admiral's ship, as a more suitable offering to one of his rank. Da Gama replied that it was not a golden Virgin, but a wooden one gilt; that it had nevertheless preserved him from the perils of the sea, and that he could not part with it. After many proofs of the hostility of the Moors and the treachery of the natives, Da Gama obtained from the zamorin the following laconic epistle to his sovereign :--- "Vasco da Gama, a gentleman of thy house, has visited my country. His arrival has given me pleasure. My land is full of cinnamon, cloves, pepper, and precious stones. What I desire to obtain in return from yours is gold, silver, coral, and scarlet." With this missive Da Gama set sail upon his return early in September. The zamorin sent sixty armed barks to attack him, but a broadside or two and a favourable wind enabled him to make good his escape. Upon a neighbouring island some of the crew discovered a large forest of wild cinnamon. Not far from here, Da Gama discovered the Angedive, or Five Islands, and in the vicinity had a brush with Indian pirates. An elderly person, differing in appearance from the natives, came on board and represented himself as an Italian Christian. He had come from the Indians of the island of Goa, he said, to beg the admiral to go thither and trade. This well-behaved old gentleman proved to be a sort of Moorish buccaneer, and, upon being put to the torture, confessed that he was a spy, and that he had been sent to reconnoitre the fleet and count their numbers. Da Gama retained him as a trophy to present to King Emmanuel. He finally left the Indian coast on the 15th of October.

When they were fairly out at sea, the pirate-prisoner made a complete confession, and his evident sincerity quite won Da Gama's heart. He gave him clothes and a supply of money. The Moor repented of his evil ways and of his pagan faith, and forthwith embraced Christianity. He was baptized by the name of Gaspardo da Gama.

The voyage back to Melinda, across the gulf, was disastrous in every sense. The weather was tempestuous and hot. The scurvy carried off thirty men in the first week, and consternation seized the officers and crew. After four months' navigation, when hardly sixteen men able to work were left on each vessel, they descried the African coast, thirteen leagues above Melinda. Descending to the latter city, they were received with joy by the king, who was anxiously awaiting their return. They took on board an ambassador sent by him to King Emmanuel. The San Rafael was lost upon this coast, and the fleet thus reduced to two vessels. Da Gama discovered the island of Zanzibar, and received offers of service from the sovereign. He doubled the Cape successfully on the 20th of March, and anchored soon after at the Cape Verds. Here, during the night, Nicolao Coelho, the captain of the caravel, slipped away, and made all haste to Portugal, in order to be the first to carry to Europe the intelligence of the grand discovery.

Da Gama now found that he could prosecute the voyage no further in his disabled vessel, the San Gabriel, and chartered a caravel in which to proceed to Lisbon. On the way his brother Paulo died, and was buried at the island of Terceira. Vasco arrived at Belem in September 1499, two years and two months after his departure. The king, informed of his approach by the previous arrival of Coelho, sent a magnificent cortege to conduct him to court. He overwhelmed him with honours, wealth, and distinctions. He himself took the title of Lord of the Conquest of Ethiopia, Arabia, Persia, and the Indies. Coelho was ennobled, and a pension of one thousand ducats secured to him. Of the one hundred and sixty men who departed upon this voyage, only fifty-five had returned, and all these were munificently rewarded for their share in the brilliant achievements of their commander. The king ordered a series of public festivities, which were preceded by a solemn service of thanksgiving to Heaven for the glory vouchsafed to the Portuguese name and nation.

Emmanuel allowed not a week to pass before he directed the necessary preparations to be made for fitting out another and more powerful fleet, to follow in Da Gama's track and attempt to colonize the Indies. He determined that Da Gama should enjoy his dignities and renown in peace, however, and intrusted the command to one Pedro Alvarez Cabral, a gentleman of merit and distinction. The fleet numbered thirteen vessels, manned by twelve hundred men, among whom were eight Franciscans to convert the pagans, and some thirty condemned malefactors to undertake communications with the savages. Among the captains were Bartholomew Diaz and his brother Diego. The specific object of the expedition was to obtain permission from the Zamorin of Calicut to establish a trading station there, the Portuguese promising in return to furnish him the same articles which the Moors furnished him, and on more advantageous terms.

The squadron set sail on the 9th of March 1500. It will appear almost incredible that, in order to avoid the calms known to prevail at that season off the coast of Guinea, they proceeded so far to the west that, late in April, they touched at the continent now known as South America, where, however, Yanez Pinzon had been before them. Cabral gave to it the name of Land of the Holy Cross; but this, as well as the name given by Pinzon, was subsequently changed to that of Brazil, from a species of dye-wood which grew in abundance there. The inhabitants were friendly, and exchanged parrots of brilliant plumage for bits of paper and cloth. Cabral put two of his criminals ashore and left them, with instructions to inquire into the history of the country and the customs of its inhabitants. He also sent one of his vessels back to Lisbon with intelligence of the discovery.

The fleet left Brazil on the 2d of May, steering to the south-east, in order to double the Cape. A terrible comet visible day and night, a storm which lasted three weeks, a waterspout reaching to the clouds,-this latter being a phenomenon which the Portuguese had never before seen,--now menaced and harassed them in quick succession. Four vessels were lost, and among them that of Bartholomew Diaz, with all on board. The rest were severely injured : but Cabral was rejoiced to find that during the storm he had weathered the redoubtable promontory. Encountering some Moorish vessels laden with gold, he seized them, but not until the crews had thrown a portion of the precious metal into the sea. At Mozambique he took a pilot for the island of Quiloa, three hundred miles to the north, whose sovereign was enriched by his gold trade with the African port of Sofala. Here he attempted to enter into a treaty of commerce ; but the prejudices entertained against Christians prevented any concessions on the part of the Moors. At Melinda, Cabral landed two criminals and the presents for the king sent out by Emmanuel. Obtaining pilots for the Indian coast, he departed on the 7th of August, and arrived at Calicut on the 13th of September.

From this point dates the first European establishment in the East Indies. Stimulated by considerations of interest, the zamorin, after many delays, granted the admiral an interview, in which the latter stated the ardent desire

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of his master, the King of Portugal, to furnish the zamorin's subjects with all articles of European production or manufacture, taking in exchange the spices and jewels of the East. A market or bazaar was at once opened, and the cargoes of the ships being transferred to it, were rapidly converted into cinnamon, diamonds, and drugs.

The Moors now became seriously jealous of the activity, power, and success of their rivals. They resorted to every means to excite the hostility of the zamorin and his subjects against them. They attacked and destroyed the Portuguese market, plundering it of goods to the amount of four thousand ducats. The inconstant zamorin offering neither apology nor restitution, Cabral determined on vengeance. He boarded two large Moorish vessels, killed six hundred men, and salted down three elephants for food. He then bombarded the town : palaces, temples, and storehouses crumbled to dust beneath the thunders of the artillery. The zamorin fled, and Cabral withdrew with his victorious fleet to Cochin, a rich capital one hundred and fifty miles to the south of Calicut, where pepper was abundant and the king was poor. Trimumpara, the monarch, was informed of the summary vengeance wreaked by the fleet upon his brother of Calicut, and at once offered the strangers hospitality and protection. The admiral sent him a silver basin full of saffron, and a silver vial filled with rose-water. Trade and barter rapidly loaded the ships with the fragrant commodities of the country. A fleet of twenty-five sail now appeared in the offing, and Trimumpara told Cabral that their object was to attack him, and that they were sent by the zamorin of Calicut. Cabral having been separated from his most efficient ship, determined not to venture a combat, and made for the north, casting anchor before Cananor, a town a little above Calicut. Here he found a commodious roadstead, an independent prince, and a soil abounding in ginger, cardamom-seeds, tamarinds, and cinnamon. Of the latter article he took four hundred quintals. The king, judging from the insignificance of this purchase that he was short

of money, offered him a further supply upon credit. Cabral expressed his sense of appreciation of this generosity, but declined the proposition. The fleet now sailed homewards. One of the vessels was lost upon the African coast, and, taking fire, was destroyed with its contents. The six ships remaining of the twelve which had left Brazil, arrived at Lisbon on the 31st of July 1501. Cabral was received with coldness by the king, partly on account of the loss of ships and men he had met with, and partly on account of his failure at Calicut, to which place he, the king, relying on Cabral's success, had sent out, three months previous to his return, a fleet of four vessels under Juan de Nueva. This expedition was singularly happy in its results, Nueva lading his vessels to great advantage at Cananor, and discovering the island of St. Helena upon his homeward voyage.

It was now evident to the Portuguese, that without the employment of force it would be impossible to obtain a permanent foothold in the Indies. After listening to a deliberation as to whether it were not best to abandon the attempt altogether, Emmanuel ordered the equipment of a grand fleet of twenty vessels, to be placed under the command of Vasco da Gama, who consented to resume active life. It was to be divided into three portions : The first, consisting of ten sail, under Da Gama, was to undertake the subjugation of the refractory kings of Malabar; the second, of five sail, under Vincent Sodrez, was to guard the entrance of the Red Sea into the Indian Ocean, and thus prevent the Turks and Moors from trading with the ports of Africa and Hindostan; and the third, of five vessels, under Stefano da Gama, was to be detailed upon any service the admiral might direct. They sailed early in 1502, and formed a treaty of alliance and commerce with the King of Sofala, without difficulty. Da Gama obtained from the King of Quiloa an engagement to pay to the crown of Portugal an annual tribute in gold fresh from the mine. Upon the Indian coast, near Cananor, he fell in with an Egyptian

vessel of the largest size, laden with costly merchandise, and crowded with Moors of high rank on their way to Mecca. He attacked, plundered, and burned her. Three hundred men and women perished in the flames, in the sea, or by the sword. Twenty children were saved and conveyed to the ship of Da Gama, who made a vow to educate them as Christians, in atonement for the apostasy of one Portuguese who had become a Mohammedan. After this sanguinary lesson, Da Gama found no obstacles to the establishment of a trading station at Cananor, where his fleet landed a portion of their cargoes. He then sailed to Calicut, determined to inflict summary vengeance upon the faithless and treacherous zamorin.

Not far from the coast he seized a number of boats in which were fifty Indians. He sent word to the zamorin, that unless satisfaction were given for the late destruction of the Portuguese bazaar before noon, he would attack the city with fire and sword, and would begin with his fifty The time having expired, the unfortunate capprisoners. tives were hung simultaneously at the yard-arms of the various vessels. The town was then reduced to ashes. A squadron was left to sweep the Moorish vessels from the seas, and Da Gama proceeded down the coast to Cochin, the city of the friendly Trimumpara. Presents and compliments were here exchanged,-the offerings of the King of Portugal being a golden crown, vases of embossed silver, a rich tent. a piece of scarlet satin, and a bit of sandal-wood, while those of his majesty of Cochin were a Moorish turban of silver thread, two gold bracelets set with precious stones, two large pieces of Bengal calico, and a stone said to be a specific against poison, and taken from the head of an animal called bulgodolph, a fabulous creature, declared by some to be a serpent, and by others to be a quadruped.

An apology was now received from the zamorin, and Da Gama returned to Calicut with only one vessel. Seeing him thus single-handed, the zamorin sent thirty-three armed canoes against him, and, without the prompt assistance of Sodrez' cruizing squadron, Da Gama would inevitably have perished. The zamorin now threatened Trimumpara with his vengeance if he continued to harbour the Portuguese and to trade with Christian infidels. Da Gama promised Trimumpara the assistance and alliance of the King of Portugal, and set sail with well-laden vessels. He met the zamorin's fleet of twenty-nine sail, and, having captured two, put the rest to flight with great slaughter. In the two that were taken he found an immense quantity of porcelain and Chinese stuffs, together with an enormous golden idol, with emeralds for eyes, a robe of beaten gold for a vestment, and rubies for buttons. Leaving Sodrez and his fleet to defend Cochin against Calicut, and to exterminate the traders from Meeca, Da Gama returned with thirteen vessels to Portugal. The king conferred upon him the titles of Admiral of the Indian Ocean and Count de Vidigueira. He again withdrew to privacy, and did not a second time emerge into public life till the year 1524, when the interests of the country under John III. again reclaimed his services in the East.

Having narrated the incidents which led to the circumnavigation of Africa, and described the several voyages which introduced the Europeans into the East, by the new route of the Indian Ocean and the Cape of Tempests, we must briefly allude to the sequel-the spread of European commerce among the islands and seaports of this highly favoured region. Alphonzo and Francesco d'Albuquerque, with a fleet of nine vessels, and Edoardo Pacheco, with three vessels, carried terror and revenge to the Malabar coast : forts were built to protect the Portuguese commerce, kings were forced to pay tribute, fleets were swept from the seas ; and, as a proverb of the time expressed it, pepper began to cost blood. Again the King of Portugal sent out a formidable squadron-thirteen ships of the line, the largest yet constructed, under Lopez Soarez. Seabattles now took place, in which the proportions of the slain were one thousand infidels to seventy-five Portuguese —in which a single European vessel contended successfully with myriads of the native barks. The sacrifice of life was truly awful; but gradually the whole eastern coast of Africa, and opposite to it, the whole western coast of India, fell under Portuguese sway.

The entire commerce of this quarter of the world was of course revolutionized by these discoveries and conquests. Before this period the productions of the East had been carried to Europe in the following manner :--- The city of Malacca, in the peninsula of the same name, was the central market to which came the camphor of Borneo, the cloves of the Moluccas, the nutmegs of Banda, the pepper of Sumatra, the gums, drugs, and perfumes of China, Japan, and Siam. These products were taken by water, either in the clumsy boats of the natives or the more solid vessels of the Moors, to the ports of the Red Sea, were landed at Tor or at Suez, whence they were transported by caravans to Cairo, and thence by the Nile to Alexandria, where they were placed on board of vessels bound to all the ports of Europe. Those intended for Armenia, Trebizonde, Aleppo, Damascus, were taken by the Persian Gulf to Bassorah, and thence distributed by caravans. The Venetians and Genoese took their portion at Beyrout, in Syria. The East Indians preferred the manufactures of Europe to gold and silver, and consequently the trade was generally in the form of barter and exchange. In addition to the products of Farther India which we have mentioned, must be added those of India Proper-the fabrics of Bengal, the pearls of Orissa, the diamonds of Golconda, the cinnamon of Ceylon, the pepper of Malabar.

Thus, not only thousands of labourers, sailors, conductors of caravans, saw themselves suddenly deprived of their livelihood by this diversion of the traffic into the hands of the Portuguese, but rich cities lost their revenues and princes lost their tribute. While the Venetians resolved to appeal to arms, the Sultan of Egypt addressed a protestation to Rome. But the

King of Portugal tranquillized the Pope by declaring his intention of extending the jurisdiction of the apostolic faith, and he prepared to resist violence by sending out, in 1507, Don Francesco Almeida, with twenty-two ships and fifteen hundred regular soldiers : he bestowed upon the new commander the title of Viceroy of the Indies. Almeida deposed the King of Quiloa, and crowned another of his own appointment; he built a fort in twenty days, garrisoned it with one hundred and fifty men, and left a brigantine and a caravel to scour and protect the coast. He bombarded Mombassa, killed fifteen hundred men and lost five. He erected forts and established trading stations at Onor, Cananor, Surat, and Calicut, upon the Malabar coast. To the important point of Sofala, upon the African coast, Emmanuel sent a distinct expedition of six ships, under Pedro da Navha and Juan da Quiros, who compelled the king to admit their nation to a share in the famous gold mines which constituted his kingdom and his wealth. In 1508, Lorenzo, the son of Almeida, while chasing the flying Moors with six men-of-war, discovered the island of Ceylon, to the south of Hindostan. Here he found the Moors and natives loading vessels with elephants and cinnamon.

Again King Emmanuel, drawing upon resources which seemed almost inexhaustible, sent out thirteen vessels, with thirteen hundred men, under Tristan d'Acunha. This fleet was driven to the coast of Brazil, and upon the way thence to the Cape of Good Hope the commander discovered the islands which now bear his name. He burned and pillaged the town of Oja, near Melinda ; he reduced a neighbouring shah to the payment of an annual tribute of six hundred golden ducats. His soldiers would not give the captured women of Brava time to remove their bracelets and earrings, but in their ruthless haste cut off their arms and ears.

It was now evident to the King of Portugal that his rule in the East could not be consolidated and extended by the same means which had obtained him his first foothold upon the coast—chance, intrepidity, and unscrupulous violence. What was required was a carefully-conceived system of government, and a man capable of administering it. Emmanuel's choice fell upon Alphonzo d'Albuquerque, whose services in the East had already been meritorious, and to whom, in 1509, he gave the title and power of viceroy. Albuquerque, whose courage obtained for him the name of the Portuguese Mars, ranks, by his talents, his severe virtues, and his disinterested zeal, among the great men whom the world has produced. He at once formed the plan of founding an empire which should extend from the Persian Gulf to the peninsula of Malacca; and determining to abandon Calicut, which had thus far been looked upon as the best point for an arsenal, he selected the island of Goa, a little to the north, captured it, and made its admirable harbour a Portuguese roadstead and its town a Portuguese capital. He built bazaars and citadels along the coast from north to south, and then turned his eyes towards Malacca-a magnificent country, ruled by a despot and inhabited by slaves. As we have said, its principal seaport was the central resort of the ships of China, Japan, Bengal, the Philippines and the Moluccas, Coromandel, Persia, Arabia, and Malabar.

The Portuguese had first visited Malacca two years previously, Emmanuel having sent one Signiera to make a treaty with the king. He had been perfidiously treated, and Albuquerque now, in 1511, appeared before the city to call the monarch to account. A long and obstinate battle resulted in the defeat of the natives and the unconditional surrender of the peninsula. The kings of Siam, Sumatra, and Pegu sent ambassadors to Albuquerque, asking the honour of his friendship. He built a citadel and returned to Cochin. But, as he left one spot to repair to another, revolt was sure to follow ; and, as the Venetians now joined the Moors to repel the Portuguese, he saw that his dominion could not be complete till he controlled the navigation of the Red Sea and the Persian Gulf. The city of Aden, in Arabia, was the key to the Red Sea, commanding, as it did, the Straits of Babelmandeb ; and the island of Ormuz was the key to the Persian Gulf. He failed to take Aden, but he succeeded easily with Ormuz, whose king acknowledged himself the vassal of Emmanuel. Albuquerque then formed a gigantic plan in reference to the Red Sea. Unable to command it by the capture of Aden, he determined to ruin Suez, at the other extremity of the sea, by forming an alliance with the King of Ethiopia, and inducing that monarch to dig a new course for the Nile and make it empty into the Red Sea instead of into the Mediterranean, thus rendering Egypt uninhabitable and Suez desert. The invasion of Egypt by the Turks, however, prevented the accomplishment of this undertaking. Thus the people and kings of the East everywhere gave way before the grand plans and deeds of Albuquerque, whom they both feared for his energy and loved for his justice. When, in 1515, he died at Goa, disgraced by his king and worn out by a thankless service, the heathen monarchs wept over his grave, and for many years went in pllgrimage to his tomb, asking his protection against the cruelty or injustice of his successors.

The Portuguese, in little more than fifty years from the first expedition of Vasco da Gama, had established an empire in these seas of truly wonderful extent and power. They held exclusive possession of the Malabar and Coromandel coasts of India Proper, were masters of the Bay of Bengal, ruled the peninsula of Malacca, and held tributary the islands of Ceylon, Sumatra, Java, and the Moluccas. To the westward, towards Africa, their authority extended as far as the Persian boundary, and over all the islands of the Persian Gulf. In Arabia, even, they had tributaries and allies, and no Arabian prince dared confess himself their enemy. They exercised an influence in the Red Sea : and upon the eastern coast of Africa, they were the masters of Quiloa, Sofala, Mozambique, and Melinda.

As Albuquerque had foreseen, Ormuz—from its fortunate situation, as an emporium of trade, at the mouth of the Persian Gulf-became the most important of the Portuguese conquests. The island was by nature little more than a barren rock, and was entirely destitute of water. Its wealth and splendour, however, during the period of its commercial supremacy, gave the world an example of the power of trade which had never yet been witnessed. The trading season lasted from January to March and from August to November : during these months, the houses fronting on the streets were opened like shops, and decorated with piles of porcelain and Indian curiosities, and perfumed with fragrant dwarf shrubs set in gilded vases. Camels laden with skins of water stood at the corners of the streets The richest wines of Persia and the most costly odours of Asia were offered in profusion to those who visited the city to trade. Thick awnings stretched from roof to roof across the promenades, excluding the rays of the sun. The luxury and magnificence of the place seemed to flow rather from the lavish extravagance of an idle prince than from the legitimate pomp of a stirring and active commercial population.

In 1580 Portugal was conquered and annexed to Spain, and the Portuguese Empire in the East at once declined, and the Dutch Empire sprang up upon its ruins. Ormuz was plundered by the Persians and English united in 1662: the very stones of which its edifices were built were carried away as ballast, and it speedily sank back into its primitive state—a barren and desolate rock. Hardly a vestige of the proud city now remains to vindicate history in its record that here once stood one of the most famous emporiums of commerce and most frequented resorts of man.

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CHAPTER VI.

DISCOVERIES OF THE SPANIARDS IN THE WEST—PONCE DF LEON—VASCO NUNEZ BE BALBOA—JUAN DIAZ DE SOLIS —FERDINAND MAGELLAN.

WE now return, in due chronological progression, to the discoveries of the Spaniards in the West. We have not space to describe, or even to mention, all the successive expeditions made to various points of the great American Continent : we select, therefore, only the more important and interesting episodes among the Spanish maritime achievements. Three heroes will occupy our attention from 1510 to 1514—Ponce de Leon, Vasco Nuñez de Balboa, and Juan Diaz de Solis.

Juan Ponce, surnamed De Leon, from his native province, was one of the Spanish captains who emigrated to Hispaniola shortly after its discovery by Columbus. After an active and prosperous career he found himself, in 1510, by the withdrawal of the king's favour, without place or occupation. He was, however, rich, and resolved to attempt to regain his credit by means of discoveries. He was avaricious, too, and would willingly have augmented his already large possessions. He had heard, from the Indians of Cuba, of the existence, to the north of Hispaniola, of an island named Bimini, where, they asserted, was a spring whose waters had the virtue of restoring youth to the aged, and vigour to the decrepit. Ponce thought that if he could discover and seize this fountain, it would be an inexhaustible source of revenue to him, as he could levy a tax upon all who derived benefit from its influence. He determined to set out in search of it, and fitted out two

stout ships at his own expense. With these he left St. Genevieve, in Porto Rico, on the 1st of March 1512, and steered boldly through the intricate group of the Lucayos. Wherever he stopped he drank of all the running streams and standing pools, whether their waters were fresh or stagnant, that he might not miss the famous spring. He inquired of all the natives he met where he could find the wondrous Fountain of Youth.

At last he discovered a land till then unknown to Europeans. Early in April, and in Easter-week, he touched what he supposed was an island, but what in reality was a portion of the continent. As the landscape was covered with flowers, he named the spot "Florida." He had several severe fights with the Indians, one of whom he made prisoner, that he might learn Spanish and give him information concerning the country. He now sailed to the south, and doubled Cape Florida on the 8th of May, which, on account of the currents, he named Cabo de las Corrientes. On the 15th he sailed along a line of small islands as far as two white ones, and called the whole group Los Martyros, or The Martyrs, from the high rocks at a distance, which had the appearance of men undergoing crucifixion. The name was singularly applicable, for the large number of seamen who have since been wrecked upon these islands has made them in reality a place of martyrdom. He discovered another group to the south-west, which he called the Tortugas, as his men took one hundred and seventy tortoises upon one of them in a short time, and might have had more if they would. Ponce de Leon continued ranging about here till September, when he returned to Porto Rico, sending one of his ships to Bimini-the smallest of the Bahamas-to see if he could discover the spring. The vessel went and returned, the captain, Perez de Ortubia, reporting that the island was pleasantly diversified with hills, groves, and rivers, but that none of the latter possessed any unusual charm.

One great advantage which resulted from the voyage of

Ponce de Leon was the discovery by his second captain, Ortubia, of the passage now known as the Bahama Channel, by which ships bound from Havana to Spain pass out into the Atlantic Ocean. This new passage became the universal track even during Ponce de Leon's life. Upon his return to court he was well rewarded for his discoveries both by land and sea, but his gathering years caused him often to regret that he had missed the Fountain of Youth.

We have now to relate the manner in which the Pacific Ocean, which had rolled for centuries in its accustomed bed, unknown to Europeans, was first seen by continental eyes. The islands discovered by Columbus were still under the exclusive dominion of the Spaniards; Hispaniola was the central point of their operations of discovery and conquest. Settled here, upon a farm, was a man, still in the prime of life, named Vasco Nuñez de Balboa. He was a native of Xeres, in Spain, and had eagerly enlisted in the late voyages of adventure. He was known to be a mere soldier of fortune, and of loose, prodigal habits, and is described as an "egregius digladiator," or adroit swordsman. His farm had involved him in debt; and to escape his embarrassments and elude his creditors, he caused himself, in 1511, to be nailed up in a cask, to be labelled " victuals for the voyage," and to be conveyed on board a ship starting upon an expedition to the mainland. When the vessel was out of sight of the shore, he emerged from the cask, and appeared before the surprised captain, Hernandez de Enciso. Being tall and muscular, evidently inured to hardships and of intrepid disposition, he found favour with the captain, especially when he told him that a venerable priest had asserted "that God reserved him for great things."

In the course of two years Balboa had acquired authority over a tract of the Isthmus of Darien, and had married the young and beautiful daughter of the Cacique of Coyba. After a victory obtained over one of the neighbouring monarchs, from whom four thousand ounces of gold and a quantity of golden utensils had been extorted, Balboa ordered one-fifth to be set apart for himself and the rest to be shared among his followers. While the Spaniards were dividing it by weight, a dispute arose respecting the fairness of the award, when the Indian who had given the gold spoke to the disputants as follows :---

"Why should you quarrel for such a trifle ? If gold is to you so precious that you abandon your homes for it, and invade the peaceful lands of others, I will tell you of a region where you may gratify your wishes to the utmost. Beyond those lofty mountains lies a mighty sea, which from their summits may be easily discerned. It is navigated by people who have vessels almost as large as yours, and, like them, furnished with sails and oars. All the streams which flow from these mountains into the sea abound in gold : the kings who reign upon its borders eat and drink out of golden vessels. Gold, in fact, is as common there as iron among you Spaniards."

Fired by this discourse, Balboa inquired whether it would be difficult to penetrate to this sea and its golden shores. "The task," the prince replied, " is arduous and dangerous. Powerful caciques will oppose you with their warriors; fierce cannibals will attack you, and devour those whom they kill. To accomplish your enterprise you will require at least a thousand men, armed like those you have with you now." To prove his sincerity, the prince offered to accompany Balboa upon the expedition at the head of ais warriors. This was the first intimation received by a European of the splendid expanse of water which was so soon to receive the name of Pacific. It exerted an immediate and radical change upon the character and conduct of Balboa. The soldier of fortune became animated by an honourable and controlling ambition ; the restless and reckless desperado saw before him a glorious path to immortality. He baptized the prince who had given him information so priceless, and proceeded to Darien to obtain the means of accomplishing his scheme. For a long time he was baffled. A terrific tempest laid waste the fields and devastated the harvests. He sent to Hispaniola for men and provisions; but the emissary was wrecked upon the coast of Jamaica. He wrote to Don Diego Columbus, who governed at San Domingo, informing him of the existence of a new ocean, bordered with shores of gold, and asking for a thousand men with whom to prosecute its discovery. He forwarded the sum of fifteen thousand crowns in gold, to be transmitted to the king as his royal fifths. Many of his followers, too, sent sums intended for their creditors in Spain.

While waiting for a reply, Balboa learned indirectly that he had fallen into disfavour with the king. One brilliant achievement might restore him to consideration and for ever fix him in the good graces of the monarch. He chose one hundred and ninety of the most vigorous and resolute of his men, and took with him a number of bloodhounds. His own peculiar body-guard was a dog named Leoncico. Leoncico was covered with scars received in his innumerable fights with the natives. Balboa often lent him to others, and received for his services the same share of booty an able-bodied man would have claimed. Leoncico had earned for his master in this way several thousands of dollars.

On the 1st of September 1513, Balboa embarked with his followers in a light brigantine and nine canoes, and ascended a stream which was navigable as far as Coyba. Here he received accessions of men, and having sent back those who were ill or disabled, prepared to penetrate the wilderness on foot. In a battle with a cacique named Quaragua, he slew six hundred of the natives. Some were transfixed with lances, others hewn down with swords, and others torn to pieces by the bloodhounds. He advanced hardly seven miles a day, but at last reached a village lying at the foot of the mountain that commanded the long wished-for prospect. Only sixty-seven men out of two hundred remained to make this last grand effort. Balboa

ordered them to retire early to repose, that they might be ready at the cool hour of dawn. They set forth at daybreak on the morning of the 26th of September. In a short time they emerged from the forests, and arrived at the upper regions of the mountain, leaving the bald summit still to be ascended. Balboa ordered them to halt, that he might himself be alone to enjoy the scene and the first to discover the ocean. He reached the peak, and there the magnificent sight burst upon his view. The water was still at the distance of two days' journey ; but there it lay, beyond the intervening space, grand, boundless, and serene. He fell upon his knees and returned thanks to God. He summoned his followers to ascend, and thus addressed them :--- "Behold, my friends," he said, "the glorious sight which we have so ardently longed for ! Let us pray to God that he will aid and guide us to conquer the sea and land which we have discovered, and in which no Christian has ever entered to preach the holy doctrine of the Evangelists. By the favour of Christ you will thus become the richest Spaniards that have ever come to the Indies." The priest attached to the expedition chanted that impressive anthem, the Te Deum ; and the Spaniards, in whom religious fervour and the thirst for pillage seemed to be mingled in equal proportions, joined in the chorus with heart and voice.

Balboa now called upon all present to witness that he took possession of the sea, its islands and surrounding lands, in the name of the sovereigns of Castile ; and the notary of the expedition made a record to that effect, to which all present, to the number of sixty-seven men, signed their names. Balboa then caused a tall tree to be cut down and fashioned into the form of a cross : this he erected on the spot whence he had first beheld the ocean. A mound of stone was likewise piled up as a monument, and the names of Ferdinand and Juana were carved upon the neighbouring trees.

A scouting party under Alonzo Martin, sent by Balboa to



BALBOA TAKING POSSESSION OF THE PACIFIC.

⁴⁴ Long live the high and mighty monarchs Don Ferdinand and Donna Juana, sovereigns of Castile, Leon, and Aragon, in whose name I take real and actual and corpored possession of these seas, and lands, and consts, and ports, and islands of the South, and all thereanto nancexel. . . . I am ready to defend thim both now and in

105

discover the best route to the sea, came, after two days' journey, to a beach, upon which were two canoes, stranded, as it were, and apparently out of the reach of water. But the tide soon came rushing in and floated them ; upon which Alonzo Martin stepped into one of them, and was thus the first European who embarked upon the ocean which Balboa had discovered and which Magellan was to name. Balboa soon arrived upon the coast ; the tide had ebbed, and the water was nearly two miles distant. But it soon returned, invading the place where the Spaniards were seated. Upon this Balboa arose, and, taking a banner representing the Virgin and Child and bearing the arms of Castile and Leon, marched knee-deep into the water, and, waving the flag, pronounced the following act of taking possession :

"Long live the high and mighty monarchs Don Ferdinand and Donna Juana, sovereigns of Castile, Leon, and Aragon, in whose name I take real and actual and corporeal possession of these seas, and lands, and coasts, and ports, and islands of the South, and all thereunto annexed ; and of the kingdoms and provinces which do or may appertain to them in whatever manner or by whatever right or title, ancient or modern, in times past, present, or to come, without any contradiction ; and if other prince or captain, Christian or infidel, or if any law, condition, or sect whatsoever, shall pretend any right to these lands and seas, I am ready to maintain and defend them in the name of the Castilian sovereigns, whose is the empire and dominion over these Indies, islands and terra firma, Northern and Southern, with all their seas, both at the Arctic and Antarctic poles, on either side of the equinoctial line, whether within or without the tropics of Cancer and Capricorn, both now and in all time, as long as the world endure, and until the final day of judgment of all mankind."

As may be supposed, no one appeared to dispute these formidable pretensions, and no champion entered the lists in behalf of the original owners of the seas, islands, and surrounding lands in question; so that Balboa called upon

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his companions to bear witness that he had duly and uninterruptedly taken possession. The notary drew up the necessary legal document, which was signed by all present. Then they all tasted the water, which, from its saltness, they felt assured was the ocean. Balboa carved a cross on a tree whose roots were below high-water mark, and, lopping off a branch with his sword, bore it away as a trophy.

Balboa now wished to perform a voyage upon the bosom of the new-found ocean. In spite of the advice of friendly Indians, who represented the season as stormy, he embarked with sixty of his men in nine cances. A tempest compelled them to seek refuge upon an island. In the night the tide completely submerged it, and rose to the girdles of the Spaniards. Their cances were broken to pieces, and at low tide they managed with great difficulty to effect their escape to the mainland. After numerous forays against the caciques ruling the neighbouring tribes, Balboa arrived at the Darien River, on the 19th of January 1514, after having accomplished one of the most remarkable feats on record, and after an expedition which must ever be memorable among deeds of intrepidity and adventure.

The king created him Adelantado of the South Sea, and Governor of Panama and Coyba, but subject to Pedrarias, the Governor of Darien. The latter regarded him as his rival, and, by a successful series of treacherous arts, brought against him a well-contrived charge of treason to the king. He was reluctantly found guilty by the alcalde, and by Pedrarias condemned to be beheaded, as a traitor and usurper of the territories of the crown. The execution took place in the public square of a small town near Darien, and was witnessed by Pedrarias from between the reeds of the wall of a house some twelve paces from the scaffold. Balboa and four of his officers were beheaded in quick succession during the brief twilight of a tropical evening. Pedrarias confiscated Balboa's property, and ordered his head to be impaled upon a pole and exposed upon the public square till decomposition should ensue.

Thus perished, at the age of forty-two years,—the victim of the meanest envy and the most odious treachery,—a man who will be ever remembered as one of the most illustrious of the early discoverers. Events transformed him from a rash and turbulent adventurer into a discreet and patriotic captain; and from the moment when he felt that he had drawn the attention of the world upon him, his conduct was that of a man born and predestined to greatness. He foll in the zenith of his glory, a worthy cotemporary of Columbus, Da Gama, and Magellan.

Juan Diaz de Solis, who, with Yanez Pinzon, Amerigo Vespucci, and Juan de la Cosa, the pilot of Columbus, was a member of the Spanish council appointed to deliberate upon discoveries yet to be made, sailed to South America in 1514, and, doubling Capes St. Roque, St. Augustin, and Frio, entered the bay upon which now stands the city of Rio Janeiro, and was probably the first European to set foot upon the coast thus far to the south. He supposed the bay to be the mouth of a passage through to the South Sea so lately discovered by Balboa. He proceeded to the south, ascertaining the position of every headland and indentation with all the precision the instruments and science of the time would permit. At last he found a great opening of the sea towards the west : he took possession of the northern coast for the King of Spain, and named the gulf Fresh-Water Sea. Subsequently, finding that it was a river, and that silver mines existed there, he named the stream Rio de la Plata. The Indians called it Paraguaza. He found the country fertile and attractive, and abundance of the wood which had given to the whole region the name of Brazil. He went on shore with a small party, but soon fell into an ambuscade laid for them by the natives. Solis and five of his companions were taken, killed, roasted, and devoured by the horrible cannibals who inhabited the country. The Spaniards who remained on board the ships witnessed the shocking catastrophe, which so appalled and horrified them that they fled in dismay and sailed hastily back to Spain,

The Pope of Rome, whose authority was at this period supreme among the princes who were in communion with the Church, now thought proper to anticipate a possible collision between Spain and Portugal, the two monopolists of commerce and discovery. He declared by a bull, or papal decree, that all new countries which should be thereafter discovered to the east of the Azores were to belong to the crown of Portugal, while all that were discovered to the west should be the property of Spain. Thus, a potentate who claimed to be infallible issued a decree based upon the pontifical conviction that the world was flat, even after the very solid arguments to the contrary of Columbus and Da Gama. His Holiness, in his wisdom, imagined that one nation might sail to the right, the other to the left, and go on for ever : he did not forcsee, what was now almost palpable to every eve but that of Roman infallibility, that the Spaniards and the Portuguese would at last meet at the antipodes. There, in time, they did meet, and the very pretty dispute which arose in consequence we shall narrate in the sequel. But a more immediate effect of the decree was this :----A Spaniard, if he felt himself neglected or maltreated by his own sovereign, would offer his services to the Portuguese king, confident of employment at his hands, as the latter would thus weaken Spain and profit by discoveries made by her subjects. A Portuguese, if similarly aggrieved, would in the same way desert to the Spanish king and accept service from the Spanish crown.

It so happened that one Fernão Magalhaens, known in English as Ferdinand Magellan, a Portuguese by birth, and who had served with distinction in the East Indies under Albuquerque, addressed himself to the court of Lisbon for the recompense which was his due. His application was treated with disdain. He forthwith withdrew to Spain with a learned man who had been similarly neglected, one Ruy Falero, an astronomer, whom the Portuguese regarded as a conjurer and charlatan. Magellan made overtures for new discoveries to Cardinal Ximenes, then prime-minister of Spain, and in reality its ruler during the absence of Charles v. The Portuguese ambassador sought by every means in his power to baffle his designs, and demanded of the court that he and Falero should be given up as deserters. He even offered Magellan a reward if he would desist from his purpose, or, at least, execute it in the service of Portugal. But the cardinal listened with favour to the plan presented by Magellan, which was briefly as follows :—

Columbus, who started upon his voyage to the west in order to reach the East Indies by a western route, had failed in his object, discovering instead an intermediate continent. Magellan now proposed to seek the Portuguese Moluccas, or Spice Islands, by sailing, if possible, from the Atlantic Ocean into the South Sea, discovered by Balboa five years before. His idea was to attempt to find a passage through the mainland of South America by the Rio de la Plata, or some other channel opening upon its eastern coast. Should this succeed, Spain would possess the East Indies as well as the West ; since, if the Moluccas were discovered by way of the west, even though situated to the east, they would fall expressly within the allotment made by the late papal bull. Magellan thought the world was round, in defiance of the pontifical declaration that it was flat.

In accordance with this proposal, the Spanish crown agreed to equip a fleet of five vessels, and to give the command of it to Magellan. It was furthermore agreed that he should have a twentieth part of the clear profit of the expedition, and that the government of any islands he might discover should be vested in him and his heirs for ever, with the title of Adelantado. The five vessels were accordingly fitted out at Seville, Magellan's flag-ship being named the Trinidada. They were manned by two hundred and thirtyseven men, thirty of whom were able-bodied Portuguese seamen, upon whom Magellan principally relied. The astronomer Falero declined accompanying him, having, in his astrological calculations, foreseen that the voyage would be fatal to him. A certain San Martino, of Seville, who went in his stead, was, as will be seen, assassinated in his place at the island of Zubu. An Italian gentleman, named Pigafetta, was permitted by the cardinal to form part of Magellan's suite. He afterwards became the historian of the voyage.

The fleet set sail from Seville on the 10th of August 1519, its departure being announced by a discharge of artillery. Seville is nearly one hundred miles from the sea. by the river Guadalquivir, the seaport of which is San Lucar, whence they finally departed on the 20th of September. It would be difficult to imagine circumstances more inauspicious than those under which Magellan left the shores of Europe. The course he was to follow was unexplored : so rash was the attempt considered, that he dared not communicate to his men the real object of the expedition. The season was already advanced, and he would in all probability arrive in high southern latitudes at the coldest period of the year. To the perils naturally incident to such a voyage was to be added the unfortunate fact that the commanders of the other four ships were Spaniards, and consequently inimical to Magellan, who, though in the service of Spain, was of Portuguese birth.

In six days the squadron reached Teneriffe; of this island Pigafetta relates several curious legends current at that time. It never rained there, he says, and there was neither river nor spring in the island. The leaves of a tree, however, which was constantly surrounded by a thick mist, distilled excellent water, which was collected in a pit at its foot, whither the inhabitants and wild beasts repaired to quench their thirst. Early in October the fleet passed between Cape Verd and its islands, and coasted along the shores of Guinea and Sierra Leone. Here they met with contrary winds, sharks, and dead calms. One dark night, during a violent tempest, the St. Elmo fire blazed for two hours upon their topmast. This, which is now known to be an effect of electricity, which the ancient idolaters believed to be Castor and Pollux, which Catholics in Magellau's time regarded as a saint, and which English sailors call Davy Jones, was a great consolation to the Portuguese during the storm. At the moment when it disappeared it diffused a light so resplendent that Pigafetta was almost blinded and gave himself up for lost; but, he adds, "the wind ceased momentaneously."

Passing the equinoctial line and losing sight of the polar star, Magellan steered south-south-west, and in the middle of December struck the coast of Brazil. His men made excellent bargains with the natives. For a small comb they obtained two geese; for a piece of glass, as much fish as would feed ten men ; for a ribbon, a basket of potatoes,--a root then so little known that Pigafetta describes it as resembling a turnip in appearance and a roasted chestnut in taste. A pack of playing-cards was a fortune, for a sailor bought six fat chickens with the king of spades. The fleet remained thirteen days at anchor, and then pursued its way to the southward along the territory of the cannibals who had lately devoured De Solis. Stopping at an island in the mouth of a river sixty miles wide, they caught in one hour penguins sufficient for the whole five ships. Magellan anchored for the winter in a harbour found in south latitude 49°, and called by him Port Julian. Two months elapsed before the country was discovered to be inhabited. At last a man of gigantic figure presented himself upon the shore, capering in the sands in a state of utter nudity, and violently casting dust upon his head. A sailor was sent ashore to make similar gestures, and the giant was thus easily led to the spot where Magellan had landed. The latter gave him cooked food to eat, and presented him incidentally with a large steel mirror. The savage now saw his likeness for the first time, and started back in such fright that he knocked over four men. He and several of his companions, both men and women, subsequently went on board the ships, and constantly indicated by their gestures that they supposed the strangers to have descended from heaven. One of the savages became quite a favourite : he was taught to pronounce the name of Jesus and to repeat the Lord's prayer, and was even baptized by the name of John by the chaplain. This profession of Christianity did the poor pagan no good, for he soon disappeared, —murdered, doubtless, by his people, in consequence of his attachment to the foreigners.

The whole description given by Pigafetta of these savages, whom Magellan called Patagonians—from words indicating the resemblance of their feet, when shod with the skin of the lama, to the feet of a bear—is now known to be much exaggerated. It is certain that they were by no means so gigantic as he represented them. He adds, that they drank half a pail of water at a draught, fed upon raw meat, and swallowed mice alive ; that when they were sick and needed bleeding, they gave a good chop with some edged tool to the part affected ; when they wished to vomit they thrust an arrow half a yard down their throat. The headache was cured by a gash in the forehead.

A fearful tragedy was enacted in Port Julian. The four Spanish captains conspired to murder Magellan. The plot was discovered and the ringleaders were brought to trial. Two were hung, another was stabbed to the heart, while a number of their accomplices were left among the Patagonians. Magellan quitted Port Julian in August 1520, having planted a cross on a neighbouring mountain, and taken solemn possession of the country in the name of the King of Spain. On the 14th September, he discovered a freshwater river, which he named Santa Cruz, in honour of the anniversary of the exaltation of the cross. Here the crew, by Magellan's order, made confession and received the holy communion.

On the 21st of October, Magellan made the great discovery which has immortalized his name. He reached a strait communicating between the Atlantic Ocean and the South Sea : consulting the calendar for a name, he called it, in honour of the day, the Strait of the Eleven Thousand Virgins. It is now Magellan's Strait. It was enclosed

between lofty mountains covered with snow; the water was so deep that it afforded no anchorage. The crew were so fully persuaded that it possessed no western outlet, that, had it not been for Magellan's confidence and persistence. they would never have ventured to explore it. The strait was found to vary in breadth from one mile to ten, and to be four hundred and forty miles in length. During the first night spent in the Strait, the Santa Antonio, piloted by one Emmanuel Gomez, who hated Magellan, found her way back into the Atlantic, and returned at once to Spain. The pilot's object was principally to be the first to tell the news of the discovery, and to carry to Europe a specimen of a Patagonian giant, one of whom he had on board of his vessel. On his way he stopped at Port Julian, and took up two of the conspirators who had been abandoned there. The Patagonian was unable to bear the change of the climate, and died of the heat on crossing the line.

One of Magellan's remaining four vessels was sent on in advance of the others to reconnoitre a cape which seemed to terminate the channel. The vessel returned, announcing that the strait indeed terminated at this cape, and that beyond lay the open sea. "We wept for joy," says Pigafetta. "The cape was denominated Cabo Deseado-Wishedfor Cape-for in good truth we had long wished to see it." The sight gave Magellan the most unbounded joy, for he was now able practically to demonstrate the truth of the theory he had advanced-that it was possible to sail to the East Indies by way of the west. He now named the famous strait the Strait of the Patagonians, but a sense of justice induced the Europeans to change its name, and to call it the Strait of Magellan. At every mile or two he found a safe harbour with excellent water, cedar-wood, sardines, and shell-fish, together with an abundance of sweet celery-a specific against the scurvy.

On the 28th of November, the squadron, reduced to three ships by the loss of the Santiago, left the strait, and launched into the Great South Sea, to which, from the steady and gentle winds that propelled them over waters almost unruffled, Magellan gave the name of Pacific—a name which it has ever since retained. They sailed on and on during the space of three months and twenty days, seeing no land with the exception of two sterile and deserted islands which they named the Unfortunate. During all this time they tasted no fresh provisions. Their biscuit was little better than dust, and smelled intolerably, being impregnated with the effluvia of mice. The water was putrid and offensive. The crew were so far reduced that they were glad to eat leather, which they were obliged to soak for four or five days in the sca in order to render it sufficiently supple to be broiled, chewed, and digested. Others lived on sawdust, while mice were sought after with such avidity that they were sold for half a ducat apiece.

Scurvy now began to make its appearance, and nineteen of the sailors died of it. The gums of many were swollen over their teeth, so that, unable to masticate their leathern viands, they perished miserably of starvation. Those who remained alive tecame weak, low-spirited, and helpless. The Patagonian taken on board the Trinidada at Port Julian was attacked by the disease. Pigafetta, seeing that he could not recover, showed him the cross, and reverently kissed it. The Patagonian besought him by gestures to forbear, as the demon would certainly enter his body and cause him to burst. When at death's door, however, he called for the cross, which he kissed : he then begged to be baptized, and was received into the bosom of the Church under the name of Paul.

The vessels kept on and on, seeing no fish but sharks, and finding no bottom along the shores of the stunted islands which they passed. The needle was so irregular in its motion that it required frequent passes of the loadstone to revive its energy. No prominent star appeared to serve as an Antarctic Polar guide. Two stars, however, were discovered, which, from the smallness of the circle they described in their diurnal course, scemed to be near the pole. "We traversed," says Pigafetta, "a space of from sixty to seventy leagues a day; and, if God had not granted us a fortunate voyage, we should all have perished of hunger in so vast a sea. I do not think any one for the future will venture upon a similar voyage." It was, indeed, nearly sixty years before Drake, the second circumnavigator, entered the Pacific Ocean.

Early in March 1521, Magellan fell in with a cluster of islands, where he and his men went ashore to refresh themselves after the fatigues and privations of their voyage. The inhabitants, however, were great thieves, penetrating into the cabins of the vessels, and taking everything on which they could lay their hands. Magellan, exasperated at length, landed with forty men, burned a village, and killed seven of the natives. The latter, when pierced with arrows through and through—a weapon they had never seen before—would draw them out by either end, and stare at them till they died. Magellan gave the name of Ladrones to these islands—a name which they retain in modern geography, though, in the time of Philip IV. of Spain, they were called the Marianne Isles, in honour of Maria, his queen.

On the 7th of April the squadron entered the harbour of the island of Zubu, one of a group which has since been named the Philippines. Magellan sent a messenger to the king to ask an exchange of commodities. The king observed that it was customary for all ships entering his waters to pay tribute, to which the messenger replied, that the Spanish admiral was the servant of so powerful a sovereign that he could pay tribute to no one. The king promised to give an answer the next day, and, in the meantime, sent fruit and wine on board the ships. Magellan had brought with him the King of Massana, a neighbouring island, and this monarch soon convinced the King of Zubu that instead of asking tribute he would be wise to pay it. A treaty of peace and perpetual amity was soon established between his majesty of Spain and his royal brother of Zubu.

On the 26th of April Magellan learned that a neighbouring chief, named Cilapolapu, refused to acknowledge the authority of the King of Spain, and remained in open profession of paganism in the midst of a Christian community. He determined to lend his assistance to the converted chiefs to reduce and subjugate this stubborn prince. At midnight, boats left the ships bearing sixty men armed with helmets and cuirasses. The natives followed in twenty canoes. They reached the rebellious island, Matan by name, three hours before daybreak. Cilapolapu was notified that he must obey the Christian king of Zubu, or feel the strength of Christian lances. The islanders replied that they had lances too. The invaders waited for daylight, and then, jumping into the water up to their thighs, waded to shore. The enemy was fifteen hundred in number, formed into three battalions; two of these attacked them in the flank, the third in the front. The musketeers fired for half an hour without making the least impression. Trusting to the superiority of their numbers, the natives deluged the Christians with showers of bamboo lances, staves hardened in the fire, stones, and even dirt. A poisoned arrow at last struck Magellan, who at once ordered a retreat in slow and regular The Indians now perceived that their blows took order. effect when aimed at the nether limbs of their foe, and profited by this observation with telling effect. Seeing that Magellan was wounded, they twice struck his helmet from his head. He and his small band of men continued fighting for more than an hour, standing in the water up to their knees. Magellan was now evidently failing, and the islanders perceiving his weakness, pressed upon him in crowds. One of them cut him violently across the left leg, and he fell on his face. He was immediately surrounded and belaboured with sticks and stones till he died. His men, every one of whom was wounded, unable to afford him succour or avenge his death, escaped to their boats upon his fall.

" Thus," says Pigafetta, " perished our guide, our light,

and our support. But his glory will survive him. He was adorned with every virtue. In the midst of the greatest adversity he constantly possessed an immovable firmness. At sea he subjected himself to the same privations as his men. Better skilled than any cne in the knowledge of nautical charts, he was a perfect master of navigation, as he proved in making the tour of the world,—an attempt on which none before him had ventured." Though Magellan only made half the circuit of the earth on this occasion, yet it may be said with reason that he was the first to circumnavigate the globe, from the fact that the way home from the Philippines was perfectly well known to the Portuguese, and that Magellan had already been at Malacca.

An attempt was made in the afternoon to recover the body of Magellan by negotiation ; but the islanders sent answer that no consideration could induce them to part with the remains of a man like the admiral, which they should preserve as a monument of their victory. Two governors were elected in his stead, Odoard Barbosa and Juan Serrano. The latter, together with San Martino, the astronomer, and a number of officers, having been decoved on shore by the converted king, were murdered by him in cold blood. Juan Serrano was seen upon the shore, bound hand and foot : he begged the people in the ships to treat for his release ; and, upon this being refused, he uttered deep imprecations, and appealed to the Almighty to call to account on the great day of judgment those who refused to succour him in his hour of need. They put to sea, leaving the unfortunate Serrano to his miserable fate.

Odoard Barbosa, now sole commander, ordered the Concepçion, one of the three ships, to be burned, transferring its men, ammunition, and provisions to the other two. After landing at various islands he came to the rich settlement of Borneo, on the 9th of July. The king, who was a Mohammedan, and kept a magnificent court, sent out to them a beautiful cance, adorned with gold figures and peacocks' feathers. In it were musicians playing upon the bagpipe and drum. Eight officers of the island brought to the captain a vase full of betel areca to chew, a quantity of orange-flowers and jessamine, some sugar-cane, and three goblets of a distilled liquor which they called arrack, and upon which the sailors became intoxicated. Permission was granted the visitors to wood and water on the island and to trade with the natives. An interview with the king was likewise accorded, which took place with every possible ceremony,—processions of elephants, presents of cinnamon, and illuminations of wax flambeaux. Notwithstanding these professions of friendship, the squadron was obliged to leave Borneo very suddenly, in consequence of the appearance of one hundred armed canoes, which they imagined to be bent upon a hostile expedition.

Among the wonders of Borneo, Pigafetta mentions two pearls as large as hens' eggs, and so round that if placed upon a polished table they never remained at rest, and cups of porcelain possessing the power to denote the presence of poison, by breaking if any were put into them. At a neighbouring island, where the fleet remained undergoing repairs for six weeks, Pigafetta saw a sight which he thus describes :--- "We here found a tree whose leaves, as they fall, become animated and walk about. They resemble the leaves of the mulberry tree. Upon being touched, they make away, but when crushed they yield no blood. I kept one in a box for nine days, and on opening the box found the leaf still alive and walking round it. I am of opinion they live on air." Pigafetta's mistake here was in stating that a leaf resembled an insect : he should have spoken of the curiosity as an insect resembling a leaf. It is now known to naturalists as a species of locust.

On the 6th of November they espied a cluster of five islands, which their pilots, obtained at their last station, declared to be the famous Moluccas. They had therefore proved the world to be round, for vessels sailing to the west from Spain had now met vessels sailing thence to the east. They returned thanks to God, and fired a round from their great guns. They had been at sea twenty-six months, and had at last, after visiting an infinity of islands, reached those in quest of which they had embarked in the expedition. On the 8th, three hours before sunset, they entered the harbour of the island of Tidore. They came to anchor in twenty fathoms' water, and discharged all their cannon. The king, shaded by a parasol of silk, came the next day to visit them, said he had dreamed of their approaching visit, had consulted the moon in reference to this dream, and was now delighted to see it confirmed. He added that he was happy in the friendship of the King of Spain, and was proud to be his vassal. This potentate, whose name was Rajah Soultan Manzour, was a Mohammedan : he was "an eminent astrologer," and had numerous wives and twenty-six children.

On the 12th a shed was erected in the town of Tidore by the Spaniards, whither they carried all the merchandise they intended to barter for cloves. A tariff of exchange was then drawn up. Ten yards of red cloth were to be worth four hundred pounds of cloves, as were also fifteen yards of inferior cloth, fifteen axes, thirty-five glass tumblers, twenty-six yards of linen, one hundred and fifty pairs of scissors, three gongs, or a hundredweight of copper. As the stock of articles brought by the strangers diminished, however, their value naturally rose, and a yard of ribbon would buy a quintal of cloves : in fact, everything with which the ships could dispense on their return voyage was They were soon so deeply laden that bartered for cloves. they hardly had room in which to stow their water. The Trinidada, becoming leaky, was left behind, Juan Carvajo, her pilot, and fifty-three of the crew, remaining with her. The Vittoria bade adieu to her consort on the 21st of December, the two vessels exchanging a parting salute. The number of Europeans on board the Vittoria was now reduced to forty-six ; and the fleet, which formerly consisted of five sail, was now reduced to one.

As the Vittoria made her way through the thick archipelegoes of islands which dot the seas in these latitudes, her Molucca pilot told Pigafetta amazing stories of their inhabitants. In Aracheto, he said, the men and women were but a foot and a half high; their food was the pith of a tree; their dwellings were caverns under ground; their ears were as long as their bodies, so that when they lay down one ear served as a mattress and the other as a blanket !

In order to double the Cape of Good Hope, the captain ascended as high as the forty-second degree of south latitude : he remained wind-bound for nine weeks opposite the Cape. The crew were now suffering from sickness, hunger, and thirst. After doubling the Cape, they steered northwest for two months, losing twenty-one men on the way. At last, on the 9th of July 1522, the vessel made the Cape Verds. These were in the possession of the Portuguese; and it was a very hazardous thing for the Spaniards to put themselves in their power. However, they represented themselves as coming from the west and not from the east, and made known their necessities. Their long-boat was laden twice with rice in exchange for various articles. On its third trip the crew was detained,-the Portuguese having discovered that the Vittoria was one of Magellan's fleet. She was compelled to abandon the men as prisoners, and sailed away,-her whole equipment now numbering eighteen hands, all of them, except Pigafetta, more or less disabled. The latter, to discover if his journal had been regularly kept, had inquired at the islands what day it was, and was told it was Thursday. This amazed him, as his reckoning made it Wednesday. He was soon convinced there was no mistake in his account ; as, having sailed to the westward and followed the course of the sun, it was evident that, in circumnavigating the globe, he had seen it rise once less than those who had remained at home, and thus, apparently, had lost a day.

On Saturday, the 6th of September, the Vittoria entered the Bay of San Lucar, having been absent three years and twenty-seven days, and having sailed upwards of fourteen thousand six hundred leagues. The captain of the Vittoria, Juan Sebastian Cano, was knighted by Charles v., who gave him for his coat of arms the terrestrial globe, with a motto commemorating the voyage.

SECTION III.

FROM THE FIRST VOYAGE ROUND THE WORLD TO THE DISCOVERY OF CAPE HORN.-A.D. 1519-1616.

CHAPTER VII.

JACQUES CARTIER—SIR HUGH WILLOUGHBY AND RICHARD CHANCELLOR—MARTIN FROBISHER—SIR JOHN HAWKINS —FRANCIS DRAKE—JOHN DAVIS—THOMAS CAVENDISH —THE SPANISH ARMADA—SIR WALTER RALEIGH.

It would appear natural for the Spaniards to have sought to derive immediate profit from their discovery of a western passage to the South Sea. They did not do so, however; and a generation was destined to pass away before a second European vessel should enter Magellan's Strait. We must for a time, therefore, leave the Spanish and Portuguese in quiet possession of their Indian and American commerce, and turn to the several Transatlantic and Arctic enterprises undertaken at this period by the French and English.

Jacques Cartier, a native of St. Malo in France, had, in 1534, finished his apprenticeship as a sailor. He conceived the idea of seeking a passage to China, and the Spice Islands to the north of the Western Continent, and in the vicinity of the Pole. This was the origin of the various efforts made in quest of the renowned North-west passage. He also thought it incumbent upon France to assert her right to a share in the explorations and discoveries which were making Portugal and Spain both famous and rich. He caused his project to be laid before Francis I., who had long viewed

121

with jealousy the successful expeditions of other powers, and who is said once to have exclaimed, "Where is the will and testament of our father Adam, which disinherits me of my share in these possessions in favour of Spain and Portugal ?" He at once approved the proposition; and, on the 20th of April 1534, Cartier left St. Malo with two ships of sixty tons each. No details of the outward voyage have reached us. It was rapid and prosperous, however, for the ships anchored in Bonavista Bay, upon the eastern coast of Newfoundland, on the twentieth day.

Proceeding to the north, he discovered Belle Isle Straits, and through them descended to the west into a gulf which he called St. Lawrence, having Newfoundland on his left and Labrador on his right. He thus assured himself of the insular character of Newfoundland. He discovered many of the islands and headlands in the Gulf of St. Lawrence, and some of them bear to this day the names he gave them. He had interviews with several tribes of natives, and took possession of numerous lands in the name of the King of France. In the middle of August east winds became prevalent and violent, and it was impossible to ascend the St. Lawrence River, at the mouth of which they now were. A council was held, and a return unanimously decided upon. They arrived safely at St. Malo, after a rapid and prosperous voyage.

Francis I. immediately caused three ships, respectively of one hundred and twenty, sixty, and forty tons, to be equipped, and despatched Cartier upon a second voyage of exploration, with the title of Royal Pilot. He started in May 1535, and after a stormy voyage of two months arrived at his anchorage in Newfoundland. From thence he proceeded to the mouth of the St. Lawrence, which he calls by its Indian name of Hochelaga. Here he was told by the savages that the river led to a country called *Canada*. He ascended the stream in boats, passed a village named Stadacone,—the site of the present city of Quebec,—and arrived at the Indian city of Hochelaga, which, from a high mountain in the vicinity, he named Mont Royal,—now Montreal. He went no farther than the junction of the Ottawa and the St. Lawrence, and then returned. He remained at Stadacone through the winter, losing twenty-five of his men by a contagious distemper then very little known—the scurvy.

Cartier returned to France in July 1536, taking with him a Canadian king, named Donnaconna, and nine other natives, who had been captured and brought on board by compulsion. They were taken to Europe, where Donnaconna died two years afterwards : three others were baptized in 1538, Cartier standing sponsor for one of them. They seem to have all been dead in 1541, the date of Cartier's third voyage. The king ordered five ships to be prepared, with which Cartier again started for the scene of his discoveries. The narrative of this expedition is lost ; but it appears to have resulted in few or no incidents of interest. Cartier was ennobled upon his return in 1542, and lived ten years to enjoy his new dignity. His descriptions of the scenery, products, and Indians of Canada are graphic and correct.

In the year 1553, "the Mystery and Company of English merchant adventurers for the discovery of regions, dominions, islands, and places unknown"—at the head of whom was Sebastian Cabot—fitted out an expedition of three vessels, and gave the chief command to Sir Hugh Willoughby, "by reason of his goodly personage, as also for his singular skill in the services of war." King Edward vi. confirmed the appointment in " a license to discover strange countries."

The fleet consisted of the Buona Speranza, of one hundred and seventy tons, commanded by Sir Hugh, with thirty-eight men, the Edward Buonaventura, of one hundred and sixty tons, commanded by Richard Chancellor, pilot-major of the expedition, with fifty-four men, and the Bona Confidentia, of ninety tons, with twenty-four men. The ships were victualled for fifteen months. On board of them were eighteen merchants interested in the discovery of a north-east passage to India,—a route, therefore, attempted by the English previous to that by the north-west, as the voyage by Sebastian Cabot can hardly be considered a serious effort. A council of twelve, in whom was vested the general direction of the voyage, was composed of the admiral, pilot-major, and other officers.

The squadron sailed from Deptford on the 10th of May 1553, and fell in with the Norwegian coast on the 14th of July. On the 30th, while near Wardhus, the most easterly station of the Danes in Finmark, Chancellor's vessel was driven off in a storm, and was not seen again by the two others. The latter appear to have been tossed about in the North Sea for two months, in the course of which they landed at some spot on the western coast of Nova Zembla, being the first Europeans to visit that uninhabited waste. On the 18th of September they entered a harbour in Lapland formed by the mouth of the river Arzina. Here they remained a week, seeing seals, deers, bears, foxes, "with divers strange beasts, such as ellans and others, which were to us unknown and also wonderful." It was now the 1st of October, and the Arctic winter was far advanced. They resolved to winter there, first sending out parties in search of inhabitants. Three men went three days' journey to the south-south-west, but returned without having seen a human being. Others who went to the west and the south-east returned equally unsuccessful. This is the last positive intelligence we have of the fate of these hardy and unfortunate explorers. Α will, however, alleged to have been made by one Gabriel Willoughby, and signed by Sir Hugh, bearing the date of January 1554, shows, if authentic, that at least two of the party were alive at that period. Purchas, one of the oldest authorities upon navigation and travels extant, says that the Buona Speranza was discovered in the following spring by a party of Russians, who found all the crew frozen to death. In 1557, a Drontheim skipper told an Englishman, at Kegor, that he had bought the sails of the Bona Confidentia ; but it is not known where she was lost, or what was the fate of the crew. The will of which we have spoken, and a fragmentary diary attributed to Sir Hugh, were found by the Russians, and were restored to the kinsmen of the adventurers in England.

The Edward Buonaventura, commanded by Chancellor, and which was separated from her consorts off Wardhus, reached Archangel, on the White Sea, in Russia, in safety, and laid the foundation of a commercial intercourse between Russia and England. On his return his ship was lost on the coast of Scotland, and he himself, with several of his crew, drowned. Thus, of the three ships despatched, not one ever reached home ; and of the officers, merchants, and men, none survived to revisit their country, except a few of the common seamen of the Edward Buonaventura. The advantages acquired at such a cost of human life were limited to the barren discovery of the ice-clad coast of Nova Zembla. Nothing had been effected towards the accomplishment of a north-east passage.

Martin Frobisher, a seaman of experience and enterprise, was the first Englishman to cherish the project of attempting to penetrate to Asia by the channel supposed to exist to the north of America. He communicated his designs to his friends, and spent fifteen years in fruitless efforts to enlist capital and energy in the cause. Sailors, financiers, merchants, statesmen,-all regarded the scheme as visionary and hopeless. At last Lord Dudley, the favourite of Elizabeth, interested himself in Frobisher's success, and from that moment he experienced little difficulty in accomplishing his object. He formed a company, amassed the requisite sums of money, and purchased three small vessels,---two barks of twenty-five tons each, the Gabriel and the Michael, and a pinnace of ten tons. This valiant little fleet weighed anchor at Deptford on the 8th of June 1576, and, passing the court assembled at Greenwich, discharged their ordnance, and made as imposing an appearance as their limited outfit would allow. Queen Elizabeth waved her hand at the commander from a window, and, bidding him farewell, wished

125

him success and a happy return. On the 25th he passed the southern point of Shetland,—known as Swinborn Head. He anchored here to repair a leak and to take in fresh water. On the 10th of July he descried the coast of Greenland, "rising like pinnacles of steeples, and all covered with snow." The crew made efforts to go ashore, but could find no anchorage for the vessels, or landing-place for the boats. On the 28th Frobisher saw dimly, through the fog, what he supposed to be the coast of Labrador, enveloped in ice. On the 31st he saw land for the third time, and on the 11th of August entered a strait to which he gave his name.

He ascended this strait a distance of one hundred and fifty miles. It was not till the eighth day that he saw any inhabitants. He then found that the country was sparsely settled by a race resembling Tartars. He went ashore and established friendly relations with a colony of nineteen persons, to each one of whom he gave a "threaden point,"in other words, a needle and thread. A few days afterwards, five of the crew were taken by the natives and their boat destroyed. The inlet in which this happened was called Five Men's Sound. The next morning the vessels ran in-shore, shot off a fauconet and sounded a trumpet. but heard nothing of the lost sailors. However, Frobisher caught one of the natives in return, having decoved him by the tinkling of a bell. When he found himself in captivity, we are told that " from very choler and disdain he bit his tongue in twain within his mouth ; notwithstanding, he died not thereof, but lived until he came to England, and then he died of cold which he had taken at sea." On the 26th of August, Frobisher weighed anchor and started to return to England, the snow lying a foot deep upon the decks. He arrived at Yarmouth on the 1st of October.

One of Frobisher's sailors had brought with him a bit of shining black stone, which, upon examination, was found to yield an infinitesimal quantity of gold. The North-west passage became now a matter of secondary interest, the mines of Frobisher's Strait promising a more speedy and abundant return. The Society he had formed determined to send him out anew, in vessels better equipped and provisioned for a longer period. He left Blackwall on the 26th of May 1577, in her Majesty's ship Aide, of one hundred and eighty tons, followed by the Gabriel and Michael, his ostensible object being to discover "America to be an island environed with the sea, wherethrough our merchants may have course and recourse with their merchandise, from these our northernmost parts of Europe to those oriental coasts of Asia, to their no little commodity and profit that do or shall frequent the same." The fleet passed the Orkneys on the 8th of June.

For a month they sailed to the westward, the season of the year being that when, in those latitudes, a bright twilight takes the place of the light of day during the few hours that the sun is below the horizon; so that the crew had "the fruition of their books and other pleasures,—a thing of no small moment to such as wander in unknown seas and long navigations, especially when both the winds and raging surges do pass their common and wonted course." Throughout the voyage they met huge fir-trees, which they supposed to have been uprooted by the winds, driven into the sea by floods, and borne away by the currents.

On the 4th of July they made the coast of Greenland. The chronicler of this voyage, who had doubtless lately visited tropical latitudes, remarks that here, "in place of odoriferous and fragrant smells of sweet gums and pleasant notes of musical birds, which other countries in more temperate zones do yield, we tasted in July the most boisterous boreal blasts." In the middle of the month they entered Frobisher's Strait. On either side the land lay locked in the embrace of winter beneath a midsummer sun. Frobisher would not believe that the cold was sufficiently severe to congeal the sea-water, the tide rising and falling a distance of twenty feet. Ten miles from the coast he had seen fresh-water icebergs, and concluded that they had been formed upon the land, and by some accidental cause detached. He reconnoitered the coast in a pinnace, and penetrated some distance into the interior, returning with accounts of supposed riches which he had discovered in the bowels of barren and frozen mountains. A cargo of two hundred tons of the precious earth was taken on board of one of the vessels. "On the 20th of August," says the narrative, "it was high time to leave : the men were well wearied, their shoes and clothes well worn; their basketbottoms were torn out and their tools broken. Some, with overstraining themselves, had their bellies broken, and others their legs made lame. About this time, too, the water began to congeal and freeze about our ships' sides o' nights." The fleet, which had troubled itself very little with the North-west passage, at once set sail to the southeast, and arrived in England towards the end of September.

The specimens of ore were assayed and found satisfactory, and Frobisher's reports upon the route to China were received with favour. The Queen gave the name of Meta Incognita, or Unknown Boundary, to the region explored. The Government determined to build a fort in Frobisher's Strait and send a garrison and a corps of labourers there. In the meantime, Frobisher was despatched a third time with the same three vessels, and with a convoy of twelve freight-ships, which were to return laden with Labrador ore. They set sail on the 31st of May 1578, and made Greenland on the 20th of June. In July they entered the strait, where they were in imminent danger from storms and ice. The bark Denis, being pretty well bruised and battered, became "so leaky that she would no longer tarry above the water, and sank ; which sight so abashed the whole fleet, that we thought verily we should have tasted the same sauce." Boats were, however, manned, and the drowning crew were saved. The storm increased, and the ice pressed more and more upon them, so that they took down their topmasts. They cut their cables to hang overboard for fenders, " somewhat to ease the ships' sides from the great and dreary strokes of the ice. Thus we continued all that dismal and lamentable night plunged in this perplexity, looking for instant death; but our God, who never leaveth them destitute which faithfully call upon him, although he often punisheth for amendment sake, in the morning caused the wind to cease and the fog to clear. Thus, after punishment, consolation; and we, joyful wights, being at liberty, hoisted our sails, and lay beating off and on."

At last, at the close of July, such of the vessels as had not been separated from Frobisher's ship entered the Countess of Warwick's Sound, and commenced the work of mining and lading. The miners were from time to time molested by the natives, but lost no lives. They put on board of their several ships five hundred tons of ore, and, on the 1st of September, sailed with their precious freight to England, where they arrived in thirty days. The ore turned out to be utterly valueless,—a result so mortifying, that it disgusted the English for many years with mining enterprises and with voyages of discovery. We shall hear of Frobisher again, in connexion with Francis Drake, and in the conflict with the Spanish Armada.

We have seen that, while the Spanish and Portuguese had succeeded in their maritime expeditions, the English had hitherto failed in theirs. The tropics were held in exclusive possession by the two former nations; and the only two known routes by which ships could sail thither were also in their power. Spain and England were in a state of enmity. No English subject trading in the Spanish dominions was safe, and various outrages occurred. These were resented by the English people before they were taken up by the British Government; and the injured parties, calling to their aid all persons of adventurous spirit or shattered fortunes, set out upon the sea, if not with the commission, at least with the connivance, of the crown, to avenge their wrongs themselves.

Among the earlier adventurers was Sir John Hawkins.

His exploits were for a time brilliant and successful: at last, however, they were disastrous; and one of his young kinsmen, Francis Drake by name—who had embarked and lost all his means in the adventure—is alleged to have disobeyed orders and deserted his benefactor and superior in the hour of need. He brought his vessel—the Judith, of fifty tons—however, safely home.

Drake now resolved to engage permanently in the lawless but exciting career of which he had lately witnessed several interesting episodes. It was long before he could obtain the means of fitting out an expedition under his own command. He at last bought and equipped two vessels-one of two hundred and fifty tons, the other of seventymanned them with seventy-three men, and sailed for the Spanish dominions in America. He attacked and took the town of Nombre de Dios, on the Isthmus of Darien, but was soon obliged to retreat. He afterwards took Venta Cruz, on the same isthmus, and had the good fortune to fall in with three convoys of mules laden with gold and silver, going from Panama to Nombre de Dios. He carried off the gold and buried the silver. From the summit of a mountain he obtained a sight of the Pacific Ocean or South Sea, which so kindled his enthusiasm that he uttered a fervent prayer that he might be the first Englishman who should sail upon it. He was already the first Englishman who had beheld it.

Drake, striketh at us !" He fitted out an expedition, at his own cost and with the help of friends and partners in the enterprise, consisting of five ships; the largest, the Pelican, his flag-ship, of one hundred tons, and the smallest of fifteen. These vessels were manned by one hundred and fifty-four men. They carried out the frames of four pinnaces, to be put together as occasion required, and after the example of the Portuguese in their first Eastern voyages, took with them specimens of the arts and civilisation of their country, with which to operate upon the minds of the people with whom they should come in contact. They sailed in November 1577, but were driven back by a tempest. The expedition finally got to sea on the 13th of December.

At the island of Mogador, off the coast of Barbary, Drake attempted to traffic with the Moors, and in an exchange of hostages lost a man, who was taken by the natives. They then refused to trade, and Drake, after a vain effort to recover the sailor, left the island, and followed the African coast to the southward. Between Mogador and Cape Blanco, he took several Spanish barks called canters, one of which, measuring forty tons, he admitted into his fleet, sending his prisoners off in the Christopher, the pinnace of fifteen tons and one of the original five vessels. He landed on the island of Mayo, where the inhabitants salted their wells, forsook their houses, and drove away their goats. Off the island of Santiago he took a Portuguese vessel bound for Brazil, carrying numerous passengers and laden with wine. He kept the pilot. Nuno da Svlva, gave the passengers and crew a pinnace, and transferred the wine to the Pelican. The prize he made one of the fleet, having given her a crew of twenty-eight men.

At Cape Verd Drake left the African shore, and, steering steadily to the south-west, was nine weeks without seeing land. When near the equator, he prepared his men for the change of climate by bleeding them all himself. He made the coast of Brazil on the 4th of April 1578; the savage inhabitants making large bonfires at their approach, for the purpose, as he learned from Sylva, of inducing their devils to wreck the ships upon their coast. On the 27th he entered the Rio de la Plata, and, sailing up the stream till he found but three fathoms' water, filled his casks by the ship's side. The same night, the Portuguese prize, now named the Mary, and commanded by John Doughty, parted company, as did two days afterwards the Spanish canter, which had been named the Christopher, after the pinnace for which she had been exchanged. Drake, believing them to have concealed themselves in shoal water, built a raft and set sail in quest of them.

Early in June, Drake landed on the coast of Patagonia, where he broke up the Swan, of fifty tons, for firewood, having taken everything out of her which could be of any use ; his object being to lessen the number of ships and the chances of separation, and to render his force more compact. His men easily killed two hundred and fifty seals in an hour, which furnished them with very tolerable eating. Shortly after sailing from this spot, named by Drake Seal Bay, the fleet fell in with the Christopher again, which Drake ordered to be unloaded and set adrift. He soon met the Portuguese Mary, and on the 20th the whole squadron anchored in the harbour named Port Julian by Magellan. Intercourse was attempted with the Indians, but was stopped on account of a fray begun by the savages, in which two of the English and one of their own party were killed. The natives made no further attempt to molest the strangers during their two months' stay in the harbour.

A tragical event now followed. Magellan had in this place quelled a dangerous mutiny, by hanging several of a disobedient and rebellious company. The gibbet was still standing, and beneath it the bones of the executed were now bleaching. Drake apprehended a similar peril, and was led to inquire into the actions of John Doughty. He found, in his investigations, that Doughty had embarked in the enterprise rather in the hope of rising to the chief command than of remaining what he started, a gentleman volunteer. He had views, it seemed, of supplanting Drake by exciting a mutiny, and of sailing off in one of the ships upon his own account. The company were called together and made acquainted with the particulars; Doughty was tried for attempting to foment a mutiny, found guilty, and condemned to death by forty commissaries chosen from among the various crews. Doughty partook of the communion with Drake and several of his officers, dined at the same table with them, and, in the last glass of wine he ever raised to his lips, drank their healths and wished them farewell. He walked to the place of execution without displaying unusual emotion, embraced the general, took leave of the company, offered up a prayer for the queen and her realm, and was then beheaded near Magellan's gibbet.

This tragedy has been embellished by many fanciful additions on the part of Drake's apologists, and upon the part of his calumniators by many false statements. Different opinions are held in the matter by different writers. It is worth remarking, however, that the Spaniards, who never neglected an opportunity of loading Drake with obloquy, extolled him in this case for his vigilance and decision. Doughty was buried on an island in the harbour, together with the bodies of the two men slain in the fray with the savages.

The Portuguese prize being now found leaky and troublesome, was broken up, the fleet being thus reduced to three. On the 21st of August Drake entered Magellan Strait being the second commander who ever performed the voyage through it. He cleared the channel in sixteen days, and entered the South Sea on the 6th of September. Here the Marygold was lost in a terrible storm, and the Elizabeth being separated from Drake's vessel, wandered about in search of him for a time, and then sailed for England. Drake was driven from the Bay of Parting of Friends, as he named the spot in which he lost sight of the Elizabeth, and was swept southward to the coast of Terra del Fuego, where he was forced from his anchorage and obliged to abandon the pinnace, with eight men in it and one day's provisions, to the mercy of the winds.

The miseries endured by these eight men are hardly equalled in the annals of maritime disaster. They gained the shore, salted and dried penguins for food, and coasted on till they reached the Plata. Six of them landed, and, of these six, four were taken prisoners by the Indians. The other two were wounded in attempting to escape to the boat, as were the two who were left in charge. These four succeeded in reaching an island nine miles from the coast, where two of them died of their wounds. The other two lived for two months upon crabs and eels, and a fruit resembling an orange, which was the only means they had of quenching their thirst. One night their boat was dashed to pieces against the rocks. Unable longer to endure the want of water, they attempted to paddle to land upon a plank ten feet long. This was the laborious work of three days and two nights. They found a rivulet of fresh water ; and one of them, William Pitcher, unable to resist the temptation of drinking to excess, died of its effects in half an hour. His companion was held in captivity for nine years by the Indians, when he was permitted to return to England.

Drake, after the loss of the pinnace, was driven again to the southward, and, in the quaint language of the times, "fell in with the uttermost part of the land towards the South Pole, where the Atlantic Ocean and the South Sea meet in a large and free scope." He anchored at the cape since called Cape Horn, and gave the name of Elizabethides to all the islands lying in the neighbourhood. He anchored at the island of Mocha on the 29th of November, having coasted for four weeks to the northward along the South American shore. He landed with ten men, and was attacked by the Indians, who took them for Spaniards. Two of his men were killed, all of them disabled, and he himself badly wounded with an arrow under the right eye. Not one of the assailants was hurt. Drake made no attempt to take vengeance for this unprovoked attack, as it was evident it was begun under the mistaken idea that they were Spaniards, whose atrocities had made every native of the country their enemy. He sailed for Peru on the same day.

Early in December he learned, from an Indian who was found fishing in his canoe, that he had passed twenty miles beyond the port of Valhario—now Valparaiso; and that in this port lay a Spanish ship well laden. The prize was rifled, and one thousand seven hundred and seventy jars of Chili wine, sixty thousand pieces of gold, and a number of strings of pearls, were taken from her.

A fortnight after leaving Valparaiso, Drake anchored at the mouth of the Coquimbo. The watering party sent ashore had barely time to escape from a body of five hundred horse and foot. At another place, called Tarapaca, the waterers found a Spaniard lying asleep, and took from him thirteen bars of silver of the value of four thousand ducats. They next captured eight lamas, each carrying a hundred pounds of silver. At Arica they found two ships at anchor; from the one they took forty bars of silver, and from the other two hundred jars of wine. Drake next arrived at Callao, the port of Lima-Lima being the capital of Peru-where he immediately boarded a bark laden with silk, which he consented to leave unmolested on condition that the owner would pilot him into Callao, which he did. Here Drake found seventeen ships, which he rifled of their silver, silk, and linen, and then cut their cables and let them drift out to sea. Learning that a richly-laden treasure-ship, named the Cacafuego, had lately sailed for Paita, he at once gave chase. In a ship bound to Panama he found forty bars of silver, eighty pounds of gold, and a golden crucifix set with large emeralds. Soon after crossing the line, the Cacafuego was discovered ten miles to seaward, by Drake's brother John. The Pelican's sailing qualities were now improved by what Silva, the pilot, calls a "pretty device." Empty jars were filled with water and hung with ropes over the stern, in order to lighten her bow. The Spaniard made towards her, whereupon Drake gave her three broadsides, shot her mainmast overboard, and wounded her captain. She then surrendered. He took from her an immense quantity of pearls and precious stones, eighty pounds of gold, twenty-six tons of silver in ingots, a large portion of which belonged to the king, and thirteen boxes of coined silver. The value of this prize was not far from one million of dollars. Then, as if he had been engaged in a legal commercial transaction, Drake asked the captain for his register of the cargo, and wrote a receipt in the margin for the whole amount !

The prize thus lightened of her metallic cargo, was then allowed to depart. Her captain received from Drake a letter of safe-conduct in case she should fall in with the Elizabeth or the Mary.

Drake now considered his object in these seas as accomplished : the indignities offered by the Spaniards to his queen and country were avenged, and their commerce was well-nigh annihilated. He next examined the various plans of returning home with his booty. He thought it dangerous to go back by the way he had come : the whole coast of Chili and Peru was in alarm, and ships had undoubtedly been despatched to intercept him. Moreover, the season (for it was now February 1579) was unfavourable either for passing the Strait or for doubling the Cape. He might have followed the course of Magellan, and thus have circumnavigated the globe ; but this seemed but a paltry imitation to his daring and inventive mind. He conceived the idea of discovering a North-west passage and returning to England by the North Polar Sea. He therefore sailed towards the north, making the coast of Nicaragua in the middle of March. Here he captured a small craft laden with sarsaparilla, butter, and honey. A neighbouring island supplied him with wood and fish : alligators and monkeys also abounded there. A vessel from Manilla, which he captured while her crew were asleep, contributed to his stores large

quantities of muslin, Chinese porcelain, and silks. A negro taken from this vessel piloted him into the haven of Guatulco, on the coast of Mexico, inhabited by seventeen Spaniards and a few negroes. Drake ransacked this place, but boasts of no other booty than a bushel of silver coins and a gold chain that Thomas Moon took from the person of the escaping governor. At Acapulco he found a few Spaniards engaged in trying and condemning a parcel of the unhappy natives. He broke up the court, and sent both judges and prisoners on board his vessel.

He then sailed four thousand five hundred miles in various directions, till he found himself in a piercingly cold climate, where the meat froze as soon as it was removed from the fire. This was in latitude forty-eight north. So he sailed back again ten degrees and anchored in an excellent harbour on the California coast. This harbour is considered by numerous authorities as the present Bay of San Francisco. The natives, who had been visited but once by Europeans-under the Portuguese Cabrillo, thirty-seven years before-had not learned to distrust them, and readily entered into relations of commerce and amity with Drake's party. From the Indians the latter obtained quantities of an herb which they called tabak, and which was undoubtedly tobacco. The Californians soon came to regard the strangers as gods, and did them religious honours. The king resigned to Drake all title to the surrounding country, and offered to become his subject. So he took possession of the crown and dignity of the said territory in the name and for the use of Her Majesty the Queen. Drake named the country New Albion, in honour of Old Albion or England. After remaining five weeks in the harbour, Drake weighed anchor, on the 23d of July, resolved to abandon any further attempt in northern latitudes, and to steer for the Moluccas, after the example of Magellan.

On the 13th of October he discovered several islands in latitude eight degrees north, and was soon surrounded with canoes laden with cocoa-nuts and fruit. These canoes were hollowed out of a single log with wonderful art, and were as smooth as polished horn, and decorated throughout with shells thickly set. The ears of the natives hung down considerably, from the weight of the ornaments worn in them. Their nails were long and sharp, and were evidently used as a weapon. Their teeth were black as jet-an effect obtained by the use of the betel-root. These people were friendly and commercially inclined. Drake visited other groups, where the principal occupation of the natives was selling cinnamon to the Portuguese. At Ternate, one of the Moluccas, the king offered the sovereignty of the isles to Drake, and sent him presents of " imperfect and liquid sugar"-molasses, probably-" rice, poultry, cloves, and meal which they called sagu, or bread made of the tops of trees, tasting in the mouth like sour curds, but melting like sugar, whereof they made certain cakes which may be kept the space of ten years, and yet then good to be eaten." Drake stayed here six days, laid in a large stock of cloves. and sailed on the 9th of November. At a small island near Celebes, where he set up his forge and caused the ship to be carefully repaired, he and his men saw sights which they described in somewhat exaggerated terms :--- " Tall trees without branches, except a tuft at the very top, in which swarms of fiery worms, flying in the air, made a show as if every twig had been a burning candle ; bats bigger than large hens-a very ugly poultry; cray-fish or land-crabs, one of which was enough for four men, and which dug huge caves under the roots of trees, or, for want of better refuge, would climb trees and hide in the forks of the branches." This spot was appropriately named Crab Island.

On the 9th of January 1580, the ship ran upon a rocky shoal and stuck fast. The crew were first summoned to prayers, and then ordered to lighten the ship. The ship was at last freed, and started again on her way. Her adventures from this point offer no very salient features : she stopped at Java, the Cape of Good Hope, and Sierra Leone.

Drake arrived at Plymouth after a voyage of two years and ten months. Like Magellan, he found he had lost a day in his reckoning. He immediately repaired to court, where he was graciously received, his treasure, however, being placed in sequestration, to answer such demands as might be made upon it. Drake was denounced in some quarters as a pirate, while in others collections of songs and epigrams were made, celebrating him and his ship in the highest terms. The Spanish ambassador, Bernardino de Mendoza, who called him the Master-Thief of the Unknown World, demanded that he should be punished according to the laws of nations. Elizabeth firmly asserted her right of navigating the ocean in all parts, and denied that the Pope's grant of a monopoly in the Indies to the Spaniards and Portuguese was of any binding effect upon her. She ordered Drake's ship to be drawn up in a little creek near Deptford, to be there preserved as a monument of the most memorable voyage the English had ever yet performed. She went on board of her, and partook of a banquet there with the commander, who, kneeling at her feet, rose up Sir Francis Drake. The ship remained at Deptford till she decayed and fell to pieces : a chair was made from one of her planks and presented to the University of Oxford, where it is still to be seen.

Such was the first voyage around the world accomplished by an Englishman. Drake's success awakened the spirit and genius of navigation in England, and contributed in no slight degree to the naval supremacy she afterwards acquired. Drake made a noble use of the fortune he had acquired, in aiding the queen in her wars with Spain, and in encouraging the construction of public works. He built, with his own resources, an aqueduct twenty miles in length, with which to supply Plymouth with water. As will shortly be shown, Drake took a prominent part in the destruction of the "Invincible Armada." He afterwards died at sea, while commanding an expedition against the Spanish West India Islands.

We may briefly allude here to an attempt made in 1585. under the auspices of the English Government, by John Davis, a seaman of acknowledged ability, with two ships,the Sunshine and Moonshine,-to discover the North-west passage. After a voyage of six weeks he saw, in north latitude 60°, a mountainous and ice-bound promontory. It was the south-western point of Greenland, and he gave it the name of Cape Desolation, which it still retains. He now sailed to the north-west, discovered islands, coasts, and harbours, to which he gave appropriate appellations. He thus was the first to enter the strait which bears his name. and beyond which Baffin, thirty years later, was to discover the vast bay which, in its turn, was to bear his name. Davis made two subsequent voyages to these waters in search of a passage across the continent, but, with the exception of the discovery of Davis' Strait, effected nothing which needs to be chronicled here. This single discovery, however, was one of the utmost importance, as it served to stimulate research and to encourage further effort in this More than two centuries were nevertheless direction. destined to elapse before success was to be attained.

Queen Elizabeth now found it to her advantage to encourage displays of public spirit in private individuals, and to excite the nobles and persons of fortune to hazard their wealth in the national service. Many gentlemen of rank and position accordingly devoted a portion of their means to prosecuting discovery in distant quarters, and to planting colonies upon savage coasts. Among the most distinguished of these was Thomas Cavendish, of Trimley, near Ipswich.

This gentleman was of an honourable family, and possessed a large estate. He equipped, in 1586, three ships of the requisite burden,—the largest, the Desire, being of one hundred and forty tons, the Content, being of sixty, and the least, the Hugh Gallant, a bark of forty tons. He provisioned them for two years, and manned them with one hundred and twenty-three officers and men, some of whom had served under Sir Francis Drake. His patron, Lord Hunsdon, procured him a commission from Queen Elizabeth, thus assimilating his vessels to those of the navy. Cavendish sailed from Plymouth on the 21st of July, directing his course to the south, and touching upon the coasts of Guinea and Sierra Leone. Their course across the Atlantic to the Brazilian shore offers no remarkable features. Anchoring in a harbour on the Patagonian coast, Cavendish named it Port Desire, after his flag-ship, a name which it still retains. He entered the Strait at the commencement of January 1587, and soon discovered a miserable and forlorn settlement of Spaniards. These numbered twenty-three men, being all that remained of four hundred who had been left there three years before by Sarmiento, to colonize the Strait. They had lived in destitution for the last eighteen months, being able to procure no other food than a scanty supply of shell-fish, except when they surprised a thirsty deer or seized an unsuspecting swan. They had built a fortress, in order to exclude all other nations but their own from the passage of the Strait, but had been compelled to leave it, owing to the intolerable stench proceeding from the carcases of their unhappy companions who died of want or disease. Cavendish took the survivors on board, and named the spot upon which the fortress was built Port Famine.

Cavendish entered the Pacific late in February, after a tempestuous passage from the Atlantic side. Landing upon the Chilian coast, in the country of the Araucanians, he met with a hostile reception from the natives, who mistook his men for Spaniards, by whom the territory had been repeatedly invaded in search of gold. He afterwards undeceived them, and found them willing to satisfy his wants when convinced that they did not belong to that avaricious and cruel people. In another place, inhabited by a Spanish colony, he fought a pitched battle with two hundred horsemen, driving those who were not slain back to the mountains. Farther north, the Indians brought him wood and water on their backs. In May he captured two prizes, taking out of them twenty thousand pounds' worth of sugar, molasses, calico, marmalade, and hens. He seized upon the town of Paita, which he ransacked and burned, carrying off a large quantity of household goods and twenty-five pounds' weight of pieces-of-eight, or Spanish dollars. He afterwards continued his course along the South American and Mexican coasts.

Early in November, Cavendish, who had been told by a pilot he had taken that a vessel from the Philippines was expected, richly laden, at Acapulco, lay in wait for her off the headland of California. She was discovered on the 4th. bearing in for the Cape. She was the Santa Anna, of seven hundred tons, belonging to the King of Spain, and commanded by the Admiral of the South Sea. Cavendish gave chase, and, after a broadside and a volley of small arms, boarded her. He was repulsed, but renewed the action with his guns and musketry. The Spaniard was soon forced to surrender, and her officers, going on board the Desire, gave an account of her contents,-which they stated at thirty thousand dollars in gold, with immense quantities of damasks, silks, satins, musk, and provisions. This glorious prize was divided by Cavendish, a mutiny being very nearly the result : it was, however, prevented by the generosity of the commander. The prisoners were set on shore with sufficient means of defence against the Indians; the Santa Anna was burned, together with five hundred tons of her goods; and Cavendish then set sail for the Ladrone Islands, five thousand five hundred miles distant.

He arrived at Guam, one of the group, in forty-five days, and from thence prosecuted his homeward voyage, through the Philippine Islands and the Moluccas, to Java. He passed the months of April and May 1588, in crossing the Indian Ocean to the Cape of Good Hope. He touched at St. Helena early in June, and when near the Azores in September, heard from a Flemish ship the news of the total defeat of the great Spanish Armada. The voyage of Cavendish was the third that had been performed round the world, and was the shortest of the three,—being accomplished in eight months' less time than that of Drake.

Cavendish spent his immense wealth in equipping vessels for a second voyage, which ended disastrously, after an engagement with the Portuguese off the coast of Brazil, where he died. He ranks as one of the most enterprising, diligent, and cautious of the early English navigators.

From what we have said of the successes of the English, of their encroachments upon the domain of the Spanish, and of the ardent desire of the latter to retain the monopoly of the trade with the natives of America, and to hold the exclusive right to rob and slay them at their pleasure, the reader will be prepared for the imposing but bombastic attempt made by Spain against England in 1588. Philip II. determined to put forth his strength, and his fleet was named before it sailed, " The Most Fortunate and Invincible Armada." It was described in official accounts as consisting of one hundred and thirty ships, manned by eight thousand four hundred and fifty sailors, and carrying nineteen thousand soldiers, two thousand galley-slaves, and two thousand six hundred pieces of brass. In the fleet were one hundred and twenty-four volunteers of noble family, and one hundred and eighty almoners, Dominicans, Franciscans. and Jesuits. Instruments of torture were placed on board in large quantities, for the purpose of assisting in the great work of reconciling England to Romanism. The Spaniards and the Pope had resolved that all who should defend the queen and withstand the invasion, should, with all their families, be rooted out, and their places, their honours, their titles, their houses, and their lands, be bestowed upon the conquerors.

Elizabeth and her councillors heard these ominous denunciations undismayed, and adequate preparations were made to receive the crusaders. London alone furnished ten thousand men, and held ten thousand more in reserve : the whole land force amounted to sixty-five thousand. The fleet numbered one hundred and eighty-one vessels—fifty more in number than the Armada, but hardly half as powerful in tonnage. Eighteen of these vessels were volunteers, and but one of the one hundred and eighty-one was of the burden of eleven hundred tons. The Lord High Admiral of England, Charles Lord Howard of Effingham, commanded the fleet, with Drake, Hawkins, and Frobisher, in command of the various divisions. A form of prayer was published, and the clergy were enjoined to read it on Wednesdays and Fridays in their parish churches. The country awaited the arrival of the Spaniards in anxiety and yet with confidence.

The Armada sailed from the Tagus late in May, with the solemn blessing of the Church, and patronized by every influential saint in the calendar. A storm drove it back with loss, and it did not sail again till the 12th of July. It was descried off Plymouth on the 20th, "with lofty turrets like castles, in front like a half-moon; the wings thereof spreading about the length of seven miles, sailing very slowly, though with full sails, the winds being as it were weary with wafting them, and the ocean groaning under their weight." The English suffered them to pass Plymouth, that they might attack them in the rear. They commenced the fight the next day, with only forty ships. The Spaniards during this preliminary action found their ships "very useful to defend, but not to offend, and better fitted to stand than to move." Drake, with his usual luck, captured a galleon in which he found fifty-five thousand ducats in gold. This sum was divided among his crew. Skirmishing and detached fights continued for several days, the Spanish ships being found from their height and thickness inaccessible by boarding or ball. They were compared to castles pitched into the sea. The lordadmiral was consequently instructed to convert eight of his least efficient vessels into fire-ships. The order arrived as the enemy's fleet anchored off Calais, and thirty hours afterwards the eight ships selected were discharged of all that was worth removal and filled with combustibles. Their



A MIDNIGHT PANIC.

THE FIRE-SHIPS AND THE INVINCIBLE ARMADA.

Eight of the least efficient vessels were converted into fire-ships. These were filled with combustibles, there gues were heavily loaded, and their sides smeared with rosin and wild-fire. At midnight they were sent, with the least heavily loaded, and their sides A forgulated reasons for the affinited reasons for the affinited

guns were heavily loaded, and their sides smeared with rosin and wild-fire. At midnight they were sent, with wind and tide, into the heart of the Invincible Armada. A terrible panic seized the affrighted crews : remembering the fire-ships which had been used but lately in the Scheldt, they shouted, in agony, "The fire of Antwerp! The fire of Antwerp!" Some cut their cables, others slipped their hawsers, and all put to sea, "happiest they who could first be gone, though few could tell what course to take." Some were wrecked on the shallows of Flanders; some gained the ocean; while the remainder were attacked and terribly handled by Drake. The discomfited Spaniards resolved to return to Spain by a northern circuit around England and Scotland. The English pursued, but the exhausted state of their powder-magazines prevented another engagement. The luckless Armada never returned to Spain. A terrific storm drove the vessels upon the Irish coast and upon the inhospitable rocks of the Orkneys. Thirty of them were stranded near Connaught : two had been cast away upon the shores of Norway. In all, eightyone ships were lost, and but fifty-three reached home. Out of thirty thousand soldiers embarked, fourteen thousand were missing. Philip received the calamity as a dispensation of Providence, and ordered thanks to be given to God that the disaster was no greater.

A day of thanksgiving was proclaimed in England. Some time afterwards the queen repaired in public procession to St. Paul's. The streets were hung with blue cloth; the royal chariot was a throne with four pillars and a canopy overhead, drawn by white horses. Elizabeth knelt at the altar and audibly acknowledged the Almighty as her deliverer from the rage of the enemy.

The mines of the precious metals which the Spaniards had discovered in Peru, the wealth which they annually brought home in treasure-ships to the mother-country, together with the exaggerated accounts given by Spanish authors respecting the splendour and the civilisation of the empire of the Incas, had now begun to excite the cupidity and inflame the imagination of every other people in Europe. It was known that, at the time of the conquest of Peru by Pizarro, a large number of the natives escaped into the interior ; and rumour added that one of the sons of the reigning Inca had withdrawn across the continent to a region situated between the Amazon and the Orinoco, and called by the general name of Guiana. Here he had founded, it was added, an empire more splendid than that of Peru : its capital city, Manoa, only one European had seen. This was a Spaniard, a marine on board a man-of-war, who, according to the legend, had allowed a powder-magazine to explode, and was condemned to death for his carelessness. This penalty was commuted. however, and he was placed in a boat at the mouth of the Orinoco, with orders to penetrate into the interior. He stayed seven months at Manoa, and then escaped to Porto Rico. He gave the following account of the city and kingdom, the latter being called, he said, El Dorado, or The Gilded :----

The columns of the emperor's palace were of porphyry and alabaster, the galleries of ebony and cedar, and golden steps led to a throne of ivory. The palace, which was built of white marble, stood upon an island in a lake or inland sea. Two towers guarded the entrance: between them was a pillar twenty-five feet in height, upon which was a huge silver moon. Beyond was a quadrangle planted with trees, and watered by a silver fountain which spouted through four golden pipes. The gate of the palace was of copper. Within, four lamps burned day and night before an altar of silver, upon which was a burnished golden sun. Three thousand workmen were employed in the Street of the Silversmiths.

The name of El Dorado, as applied to the kingdom of which Manoa was the metropolis, may refer to its wealth and splendour, or it may be derived from a habit attributed by some to the emperor, by others to the high-priests, and even to the inhabitants generally when in a state of intoxication. This custom was to cause themselves to be anointed with a precious and fragrant gum, after which gold-dust was blown upon them through tubes, till they were completely incrusted with gold. This attire was naturally considered sumptuous, and, in connexion with the abundance of precious metals afforded by the country, may have given rise to the title of El Dorado. The legend, in either case, is a worthy companion to Ponce de Leon's Fountain of Youth.

No geographical fiction ever caused such an expenditure of blood and treasure as this. The Spaniards alone lost, in their attempts to discover the city of Manoa, more lives and money than in effecting any of their permanent conquests. New adventurers were always ready to start, upon the discomfiture or destruction of those who had gone before; and no disappointment suffered by the latter could daunt the hopes of those who believed the discovery reserved for them. The Spanish priests regarded the mania as a device of the Evil One to lure mankind to perdition.

The greater portion of these persons were adventurers, soldiers of fortune, and Quixotic knights-errant. The most distinguished of the converts to a belief in the existence of an El Dorado, however, it would be unjust to class among them. Sir Walter Raleigh, an Englishman of the highest talent and character, had long been filled with admiration at the courage and perseverance exhibited by the Spaniards in the pursuit of their romantic and brilliant chimera. As he himself firmly believed it to be a reality, he determined to make an attempt himself. A part of his design was to colonize Guiana, and thus to extend the sphere of the industrial and commercial arts of England. He was familiar with the sea, as he had already sent out several expeditions for the colonization of Virginia in America.

He sailed from Plymouth in February 1595, with five vessels and a hundred soldiers. In order to reach the capital city of Guiana, it was necessary to ascend the Orinoco, the navigation of which was completely unknown to the English. As the ships drew too much water, a hundred men embarked with Raleigh in boats and proceeded up the stream. In these they remained for a month, exposed to all the extremes of a tropical climate,—sometimes to the heats of a burning sun, and again to violent and torrential rains. Raleigh's account of their progress through the labyrinth of islands and channels at the river's mouths, of their precarious supplies of food and water, the appearance of the country and the manners of the natives, and, finally, of their entrance into the grand bed of the superb Orinoco, has been admired for its descriptive beauty as well as ridiculed for its extravagant credulity.

Raleigh ascended the stream nearly two hundred miles, when the rapid and terrific rise of its waters compelled him to return. He took formal possession of the country, and made the caciques swear allegiance to Queen Elizabeth. He returned to England during the summer, having been but five months absent.

On the death of Elizabeth, Raleigh was imprisoned for thirteen years during the reign of James, her successor, for the crime of high-treason and supposed participation in the plot to place Lady Arabella Stuart on the throne. In 1617 he equipped a fleet of thirteen vessels in which to proceed to Guiana for the purpose of again seeking El Dorado. The fleet arrived in safety, but Raleigh was too unwell to ascend the Orinoco in person. Captain Keymis led the exploring party, and, upon being compelled to return to the ship without success, and with the news of the death in battle of Sir Walter's eldest son, committed suicide. Raleigh sailed to Newfoundland to victual and refit ; but a mutiny of the crews forced him to return to England, where he was beheaded for the crime already punished by thirteen years' confinement.

CHAPTER VIII.

ALVARO MENDANA — QUIROS — WILHELM BARENTZ — THE FIVE SHIPS OF ROTTERDAM : MAHU AND SEBALD DE WEERT — VAN NOORT — HENRY HUDSON — JORIS SPIL-BERGEN — SCHOUTEN AND LEMAIRE — WILLIAM BAFFIN.

THE progress of discovery now recalls us to Spain. About the year 1567, one Alvaro Mendana de Neyra, who had thus far lived in complete obscurity, followed his uncle, Don Pedro de Castro, to Lima, in Peru, where he had been appointed governor. Mendana, disdaining commerce, and feeling little inclination to lead a monotonous life on shore, after the taste he had had during the passage of a roving existence upon the water, resolved to undertake the discovery of new lands in the name of the King of Spain. His uncle encouraged him in his design, and furnished him with the necessary funds. Mendana set sail from Callao on the 11th of January 1568. He proceeded fourteen hundred and fifty leagues to the west, and discovered a group of islands in about 10° south latitude. He sailed round another of the group, St. Christopher, and, after several disastrous encounters with the natives, returned to Callao. This voyage, the most important undertaken by the Spanish since the discovery of America, gave rise to multitudes of fables, with which the historians and chroniclers of Spain filled the minds of the people during the century which followed. The islands discovered by Mendana were represented as enormously rich in gold and the precious metals. The name of Solomon was given to the group,-a name which was thought to be eminently suited to so luxurious an archipelago, having formerly been that of a luxurious prince. As in those days the art of scientific navigation 149

was in its infancy, and as latitude and longitude were not fixed with any great degree of precision, the position of the Solomon Islands was very loosely marked down by Mendana; and the question of their locality became, and for a long time remained, one of the most puzzling questions in geography.

Mendana sent home to the Spanish Government brilliant accounts of his discoveries, and solicited the means of prosecuting them still further. War and other engagements prevented the ministry from attending to his requests till the year 1595, when he obtained the command of an expedition having for its object the colonization of St. Christopher. He sailed from Callao in April with four ships carrying four hundred men. Pedro Fernandez de Quiros, of whom we shall afterwards speak more particularly, was the pilot of the fleet. They stopped at Paita, where they watered and enlisted four hundred additional men, and on the 16th of June finally started in quest of the long-lost islands. A month afterwards, being in latitude 11° south, Mendana discovered a group of three islands, to which he gave a collective name as well as individual names. He called them Las Marquesas de Mendoca, in honour of the Marquis of Mendoça, a Spaniard of distinction. They are still known as the Marquesas Islands.

Mendana took possession of the islands in the King's name, and sowed maize in many spots which he thought favourable to its growth. This being done, the shallop refitted, three crosses erected, and wood and water having been stored, the squadron set sail again for the still missing archipelago. The soldiers soon became despondent, and the crews were placed upon short allowance. At last, when eighteen hundred leagues from Lima, they fell in with a large island, one hundred miles in circuit, which Mendana named Santa Cruz—since called Egmont Island by Carteret. Fifty small boats rigged with sails came out to the ship. The men were black, with woolly hair, dyed white, red, and blue. Their teeth were tinged red, and their faces and bodies marked with streaks. Their arms were bound round with bracelets of black rattan, while their necks were decorated with strings of beads and fishes' teeth. Mendana at once took them for the people he sought. He spoke to them in the language he had learned upon his first voyage; but they neither understood him, nor he them. Without provocation, they discharged a shower of arrows at the ship, which lodged in the sails and the rigging, without, however, doing any mischief. The soldiers fired in return, killing one and wounding many more.

Friendly relations were soon restored, and Mendana, landing his men, proceeded to found a colony.

At this point the details furnished by the several chroniclers of the expedition become vague and unsatisfactory. It appears that the natives withheld all supplies from the Spaniards, and that Mendana caused two mutineers to be beheaded, and another to be hung. A war of extermination now commenced, and a state of sedition, misery, and want ensued, which brought Mendana rapidly to the grave. He died of disappointment and regret, in October 1595. His successor being wounded, died in November. The crew, worn out with fatigue and sickness, and being reduced to such an extent that twenty resolute Indians could have destroyed them, resolved to suspend the enterprise and re-embark. They took in wood and water, and sailed on the 7th of November. Quiros maintained discipline among a mutinous crew, and, after almost superhuman efforts to navigate his crazy ships upon an unknown sea, arrived with the remains of the expedition at Manilla. From thence Quiros returned to Acapulco, in Mexico, and thence to Lima, where he petitioned the viceroy for the means of continuing the researches of Mendana.

In the year 1514, the Dutch resolved to seek a north-east passage by water to the Indies, across the Polar regions of Europe. Their first two attempts were attended with so little success that the States-General abandoned the undertaking, contenting themselves with promising a reward to the navigator who should find a practicable route. In 1596, the city of Amsterdam took up the matter where the Government had left it, and equipped two vessels, the chief command of which was given to Wilhelm Barentz. He started on the 10th of May, and passed the islands of Shetland and Feroë on the 22d. Not long after, the fleet saw with wonder one of the phenomena peculiar to the Arctic regions—three mock suns, with circular rainbows connecting them by a luminous halo. On the 9th of June, they discovered two islands, to which they gave the names of Bear and Walrus Islands. They kept on to the usual Arctic accompaniment of icebergs, seals, auroræ boreales, whales, and white bears, till they came to a land which they named Spitzbergen, or land of Sharp-peaked Mountains.

On the 17th of July they arrived at Nova Zembla-discovered in 1553 by Willoughby-and here the two ships were accidentally separated. In August the vessel of Barentz was embayed in drifting ice, and no efforts could release her from her dangerous position. Winter was coming on, and the crew, despairing of saving the ship, which was now groaning and heaving under the pressure of the ice, resolved to build a house upon the land, " with which to defend themselves from the colde and wilde beasts." They were fortunate enough to find a large quantity of drift-wood, which had evidently floated from a distance, as the icy soil around them yielded neither tree nor herb. The work began and continued in the midst of constant fights with bears and the arduous labour of dragging stores from the ship upon hand-sleds. The cold was so extreme that their skin peeled off upon touching any iron utensil. Snow storms interrupted the progress of the house, for which they were soon obliged to obtain materials by breaking up the ship. One of the men, being pursued by a bear, was only saved by the latter's waiting to contemplate the body of one of his fellow-bears, which the sailors had killed and left to freeze stiff in an upright position.

On the 12th of October half the crew slept in the house for the first time : they suffered greatly from cold, as they had no fire, and because, as the narrative quaintly remarks, "they were somewhat deficient in blankets." The roof was thatched, by the end of October, with sail-cloth and seaweed. On the 2d of November the sun raised but half his disk above the horizon : the bears disappeared with the sun, and foxes took their place. The clock having stopped, and refusing to proceed, even with increased weights, day could not be distinguished from night, except by the twelve-hour glass. The beer, freezing in the casks, became as tasteless as water. Half a pound of bread a day was served out to each man: the provisions of dried fish and salt meat remained still abundant. The chimney would not draw, and the apartment was filled with a blinding smoke-which the crew were obliged to endure, however, or die of cold. The surgeon made a bathing-tub from a wine-pipe, in which they bathed four at a time. They were several times snowed up, and the house was absolutely buried. Though half a league from the sea, they heard the horrible cracking and groaning of the ice as the bergs settled down one upon the other, or as the huge mountains burst asunder. On one occasion, unable to support the cold, they made a fire in their house with coal brought from the ship. It was the first moment of comfort they had enjoyed for months. They kept up the genial heat until several of the least vigorous of the men were seized with dizziness and with the peculiar pains known as the hot-ache. Gerard de Veer, the chronicler of the expedition, caught in his arms the first man that fell, and revived him by rubbing his face with vinegar. He adds, "We had now learned that to avoid one evil we should not rush into a worse one."

They set traps all around their cabin, with which they caught on an average a fox a day. They ate the flesh, and with the skin made caps and mittens. They had the good fortune to kill a bear nine feet long, from which they obtained one hundred pounds of lard. This they found useful,

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not as pomatum, but as the means of burning their lamp constantly, day and night, as if it were an altar and they the vestal virgins. On the 19th of December they congratulated themselves that the Arctic night was just onehalf expired ; "for," says the narrative, "it was a terrible thing to be without the light of the sun, and deprived of the most excellent creature of God, which enliveneth the entire universe." On Christmas eve it snowed so violently that they could not open the door. The next day there was a white frost in the cabin. While seated at the fire and toasting their legs, their backs were frozen stiff. Thev did not know by the feeling that they were burning their shoes, and were only warned by the odour of the shrivelling leather. They put a strip of linen into the air, to see which way the wind was : in an instant the linen was frozen as hard as a board, and became, of course, perfectly useless as a weathercock. Then the men said to each other, "How excessively cold it must be out of doors !"

The 5th of January was Twelfth Night, and the hut was buried under the snow. In the midst of their misery, they asked the captain's leave to celebrate the hallowed anniversary. With flour and oil they made pancakes, washing them down with wine saved from the day before and borrowed in advance from the morrow. They elected a king by lot, the master gunner being indicated by chance as the Lord of Nova Zembla. On the 8th the twilight was observed to be slightly lengthening, and, though the cold increased with the returning sun, they bore it with cheerfulness. They noticed a tinge of red in the atmosphere, which spoke of the revival of nature. They visited the ship, and found the ice a foot high in the hold : they hardly expected ever to see her float again. The difficulty of obtaining fuel was now such, that many of the men thought it would be easier and shorter to lie down and die than make such dreadful efforts to prolong life. To save wood during the daytime they played snow-ball, or ran, or wrestled, to keep up the circulation.

On the 24th of January, Gerard de Veer declared he had seen the edge of the sun : Barentz, who did not expect the return of the luminary for fourteen days, was incredulous, and the cloudy state of the weather during the succeeding three days prevented the bets which were made upon the subject from being settled. On the 27th they buried one of their number in a snow grave seven feet deep, having dug it with some difficulty, the diggers being constantly obliged to return to the fire. One of the men remarking that, even were the house completely blocked up fifteen feet deep, they could yet get out by the chimney. and a sailor ran out to see if he succeeded. He rushed back, saving he had seen the sun. Everybody hastened forth and "saw him, in his entire roundness," just above the horizon. It was then decided that De Veer had seen the edge on the 24th, and they "all rejoiced together, praising God loudly for the mercy."

Another season of snow now set in, while, at the same time, the ice that bound the ship began to break up, so that the men feared she would escape and float away while they were blockaded in the house. They were obliged to make themselves shoes of worn-out fox-skin caps, as the leather was frozen as hard as horn. On the night of the 6th of April a bear ascended to the roof of the house by means of the embankments of snow, and, attacking the chimney with great violence, was very near demolishing it. On the 1st of May they ate their last morsel of meat, relying henceforth on what they might entrap or kill.

It was now decided that even if the ship should be disengaged she would be unfit to continue the voyage. Their only hope lay in the shallop and the long-boat, which they endeavoured to prepare for the sea, in the midst of interruptions from bears, who "were very obstinate to know how Dutchmen tasted." As late as the 5th of June it snowed so violently that they could only work within doors, where they got ready the sails, oars, rudder, &c. On the 12th they set to work with axes and other tools to level a path from the ship to the water—a distance of five hundred paces. On the 13th Barentz wrote a brief account of their voyage and sojourn, placed it in a musket-barrel, and attached it to the fireplace in the house for the information of future navigators. They then dragged, with infinite labour, the boats to the water, together with barrels and boxes of such stores as their now impoverished ship could yield. They bade adieu to their winter quarters on the 14th, at early morning, "with a west wind and under the protection of Heaven." Barentz, who had been a long time ill, died on the 20th, while opposite Icy Cape, the northernmost point of Nova Zembla. His loss was deeply regretted ; but their "grief was assuaged by the reflection that none can resist the will of God."

The men were often obliged to drag the boats across intervening fields of ice; and sometimes, when the wind was contrary, they drew them up on a floating bank, and, making tents of the sails, camped out, as if on military service. The sentinels frequently challenged bears, and, on one occasion, three coming together and one being killed, the surviving two devoured their fallen companion. Through dangers and difficulties then unparalleled in navigation, they struggled hopefully on, descending the western coast of Nova Zembla towards the northern shores of Russia and Lapland. On the 16th of August they met a Russian bark, which furnished them with such provisions as the captain could spare. On the 20th they touched the coast of Lapland upon the White Sea, where they found thirteen Russians living in miserable huts upon the fish which they caught. On the 2d of September they arrived at Kola, in Lapland, where they found three Dutch ships, one of which, was their consort, which had been separated from them ten months before. Having no further use for their boats, they carried them with ceremony to the "Merchants' House," or Town Hall, where they dedicated them to the memory of their long voyage of four hundred leagues over a tract never traversed before, and which they had accomplished in

156

open boats. They started at once for home, and arrived on the 1st of November at Amsterdam, twelve in number. The city was greatly excited by the news of their return, for they had long since been given up for dead. The chancellor and the "ambassador of the very illustrious King of Denmark, Norway, the Goths and the Vandals" were at that moment at dinner. The voyagers were summoned to narrate their adventures before them—which they did, "clad in white fox-skin caps."

No voyage had hitherto been so fruitful in incident, peril, and displays of persevering courage and fortitude. Though it resulted in no discovery except that of the western coast of Nova Zembla, it served the useful purpose of demonstrating the difficulty, if not the impossibility, of effecting a north-east passage.

The Dutch, who had now succeeded the Portuguese in the possession and control of the East Indies, had, up to the year 1598, made all their voyages thither by the Portuguese route—the Cape of Good Hope. In this year two fleets fitted out by them were directed to proceed by the Strait of Magellan and across the South Sea. The first of these expeditions is known as that of the Five Ships of Rotterdam, one of the five, however, becoming separated, and forming a distinct enterprise, under Sebald de Weert : the second was the voyage of Oliver Van Noort.

The Five Ships of Rotterdam were equipped at the charge of several merchants called the Company of Peter Verhagen. The flag-ship was commanded by Jacob Mahu; the second in command being Sebald de Weert. They sailed from Goree, in Holland, on the 27th of June 1598.

On the 6th of April they entered the Strait of Magellan, and were compelled to pass the Antarctic winter there—that is, till late in August. Gales of wind followed each other in quick succession; and the anchors and cables were so much damaged that the crews were kept in continual labour and anxiety. The scarcity of food was such that the people were sent on shore every day at low water, frequently in rain, snow, or frost, to seek for shell-fish or to gather roots for their subsistence. These they devoured in the state in which they were found, having no patience to wait to cook them. One hundred and twenty men were buried during this disastrous winter.

On the evening of September the 3d, the whole fleet, including a shallop of sixteen tons, named the Postillion, which had been put together in the Strait, entered the South Sea. A storm soon arose, scattering them in every direction. Of these five ships, only one reached home again. The second was abandoned at sea; the third was plundered by the Japanese at Bungo; the fourth was taken by the Spaniards at Valparaiso; and the fifth fell into the hands of the Portuguese at the Spice Islands. The Postillion shallop, which had been launched in the Strait, was never heard of after she entered the Pacific Ocean.

The plan of the South Sea Expedition under Oliver Van Noort was in all respects similar to that of Mahu and De Weert, and the equipment was made at the joint expense of a company of merchants. The vessels fitted out were the Mauritius, whose tonnage is not mentioned-in which sailed, as Admiral, Van Noort, who was a native of Utrecht, and an experienced seaman-the Hendrick Frederick, and two yachts, the whole being manned by two hundred and fortyeight men. The instructions to the Admiral were to sail through Magellan Strait to the South Sea, to cruise off the coast of Chili and Peru, to cross over to the Moluccas to trade, and then, returning home, to complete the circumnavigation of the globe. He sailed on the 13th of September 1598, three months after the departure of the Five Ships of Rotterdam. After an absence of three years Van Noort returned to Rotterdam on the 26th of August 1601, where he was received with the utmost joy. His was the first Dutch vessel that circumnavigated the globe, and the only one of the nine ships that sailed from Holland in 1598 in that design which succeeded in fulfilling it. The voyage contributed nothing to geography, but, in spite of the instances of barbarity with which it abounded, added to the warlike and commercial reputation of the country, and therefore met with favour from both Government and people.

Pedro Fernandez de Quiros was the pilot of Mendana's second expedition. During the voyage he had reflected deeply upon the probability of the existence of a Southern continent : on his return to Peru, he asserted it, and devoted the remainder of his life to the prosecution of a plan of discovery. He was the first to bring forward scientific arguments in support of the theory-one which, by the way, was destined to agitate and interest the world for two centuries, till its final overthrow by Cook. He presented two memorials to Don Louis de Valasco, the viceroy, praying for ships, men, and other necessaries, with which "to plough up the waters of the unknown sea, and to seek out the undiscovered lands around the Antarctic Pole, the centre of that horizon." His arguments were many of them profound. and made a deep impression upon the viceroy, who despatched him with strong recommendations to the court of Spain. Philip III, gave favourable attention to his projects, and ordered that Quiros should go in person upon an expedition " among these hidden provinces and severed regions-an expedition destined to win souls to heaven and kingdoms to the crown of Spain." Quiros returned to Lima " with the most honourable schedules which had ever passed the Council of State." He built three ships, and embarked on the 20th of December 1605, holding his course west by south.

A thousand leagues from Peru he discovered a small island which he named Encarnaçion : to others, of little importance and uninhabited, he gave the names of Santelmo, St. Miguel, and Archangel : the tenth he called Dezena. On the 10th of February 1606, land was seen from the topmast-head, and, to the joy of all, columns of smoke—an unmistakable sign that the land was inhabited—were perceived ascending at 160

numerous points. A boat advanced to the surf, through which it seemed impossible to gain the shore. A young man, Francisco Ponce by name, stripped off his clothes, saying that, if they should thus turn their faces from the first danger which offered, there would be no hope of eventual success. He threw himself into the sea, and, after a fierce struggle with the receding waves, clambered up a rock to a spot where one hundred Indians were awaiting him. They seemed pleased with his resolution, and frequently kissed his forehead. Peace was made, and a safe anchorage was pointed out. The island thus discovered subsequently became, for many reasons, the most famous in the whole Pacific Ocean. Quiros called it Sagittaria ; but it is now known as Tahiti or Otaheite.

The fleet stayed here but two days, and then continued on its way. On the 26th of April he made a land which he took to be the continent of which he was in search, and to which he gave the name of Tierra Austral del Espiritu Santo. Bougainville and Cook, who arrived here a century and a half afterwards, thought themselves justified, by acquiring the certitude that it was a group of islands and not a continent, in christening them anew—Bougainville naming them the Grand Cyclades, and Cook the New Hebrides. The Spaniards found it impossible to make peace with the natives, and the few days which they spent there were passed in wrangling and bloodshed.

The achievements and discoveries of Quiros properly end here. His ships were separated, and his own crew disabled by the effects of poisonous fish which they had eaten. He called a council of his officers, and asked their opinion upon a choice of courses,—a prosecution of the voyage to China, or a return to Mexico. The latter was decided upon. Quiros arrived at Acapulco nine months after his departure from Callao.

His stirring appeals as to farther efforts in the same direction were disregarded by the feeble successor of Charles v.; and Quiros, who, though a Portuguese by birth, is often

styled the last of the Spanish heroes, died at Panama on his way back to Lima.

While energetic efforts were thus being made in the regions lying about the equator, another adventurer, equally enterprising, was endeavouring to reach the Pole. Henry Hudson, a seaman renowned for his hardy and daring achievements, was appointed, in 1607, by the Muscovy Company of London, to the command of a vessel intended to penetrate to China by the Arctic Seas to the north of Europe. His crew consisted of ten men and a boy. He advanced as far as Greenland, and returned by Spitzbergen, -being convinced that the ice formed an insurmountable barrier againt farther progress. He again set out in 1608, and keeping more to the eastward, passed to the north of Norway, Sweden, and Russia as far as Nova Zembla. The ice again stopped him, and he returned, --persuaded that the north-eastern passage did not exist. The next year he was again sent upon the same errand ; but, being still unsuccessful, he crossed the Atlantic to America. He coasted along the continent as far as Chesapeake Bay, and then returned to the north, entering Delaware Bay and arriving in sight of the islands of Neversink on the 2d of September. This he pronounced a "good land to fall in with, and a pleasant land to see." The next morning he passed Sandy Hook, and came to anchor in what is now the Lower Bay of New York. What an event in the history of American population, enterprise, commerce, intelligence, and power, was the dropping of that anchor in Sandy Hook !

Here he lingered a week in friendly intercourse with the natives of New Jersey, while a boat's company explored the waters up to Newark Bay. And now the great question :— Shall he turn back, or ascend the stream ? Hudson was of a race not prone to turn back, by sea or land. On the 11th of September he raised the anchor of the Half-Moon, and passed through the Narrows, beholding on both sides "as beautiful a land as one could tread on ;" the ship floated cautiously and slowly up the noble stream,—the first that

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ever rested on its bosom. He passed on till he came to anchor in deep water, near the site of the present city of Albany. Happy if he could have closed his gallant career on the banks of the stream which so justly bears his name, and thus have escaped the sorrowful and mysterious catastrophe which awaited him the next year.

He soon after returned to England ; and, not being discouraged, nor finding it difficult to obtain the means of continuing his maritime adventures, he set sail, in 1610, in a vessel of fifty-five tons' burden, manned by twentythree men and victualled for six months. He touched at the Orkneys, and anchored at Iceland. Mount Hecla revealed to him the magnificence of a volcano in travail, and the Hot Springs obligingly cooked his food. He passed Greenland, where the sun set in the north. In the course of June and July he passed to the northward of Labrador, and followed the strait which now bears his name. In spite of ice and disturbances among his crew, which at times assumed the character of a mutiny, he pushed on into the great inland sea known as Hudson's Bay. For a long time he did not know that it was a bay, and naturally was led to hope that he was on the point of attaining the object of all his efforts,-a passage by the north-west to China.

On the 1st of November, after seeking winter quarters, his men found a suitable spot for beaching their vessel. Ten days afterwards they were frozen in, with provisions hardly sufficient to last, upon the most meagre allowance, till they could expect a release from the ice. A reward was offered to those who added to the general stock by catching either birds or fish, or animals serviceable for food. A house was built; but the season was so far advanced that it could not be rendered fit to dwell in. The winter was severe, and the men lived at first upon partridges, then upon swans and teal, and finally upon moss and frogs. Towards spring they obtained furs from the natives, in exchange for hatchets, glass, and buttons.

When the ice broke up they prepared to return ; the

last ration of bread being exhausted on the day of their departure. A report was circulated among the crew that Hudson had concealed a quantity of bread for his own use, and a mutiny, fomented by a man named Green, broke out on the 21st of June. Hudson was seized and his hands bound. Together with the sick, and those whom the frost had deprived of the use of their limbs, he was put into the shallop and set adrift. Neither he, nor the boat, nor any of its crew, were ever heard of again alive or dead. They undoubtedly perished in a violent storm which arose the next day, though, had they survived it, they must have soon succumbed either to hunger or exposure. Hudson died in the bay which bears his name : his name will live, however, indissolubly connected, as it is, with the American Mediterranean and the superb river and harbour which have contributed to make New York, in seventy-five years, the second commercial metropolis of the world.

We have seen that the Dutch succeeded the Portuguese in the possession of the East Indies. During the struggle between these two powers for supremacy over the Spice Islands, the Dutch East India Company resolved to make a vigorous effort to reach the Moluccas by the Strait of Magellan. They equipped a fleet of six ships, for the purpose of exploring a new route, under the command of Joris Spilbergen as admiral, who had already conducted a Dutch fleet to the Indies. He sailed from the Texel on the 8th of August 1614.

The vessels entered the South Sea on the 6th of May, and on the 25th anchored off Mocha Island, half a league from the coast of Chili. The natives were delighted to learn that the strangers were the enemies of the Spaniards their oppressors, and to see that their ships were so large and well armed. The chief of the island visited the admiral's ship and remained his guest all night. A hatchet was the price fixed upon for two fat sheep ; and a hundred were obtained at this rate.

On the 29th the vessels anchored off the island of Santa Maria, and though there were Spaniards upon it, nego-tiations were opened. The Dutch officers were invited by a Spaniard to dine on shore, and, having accepted and assembled for the purpose, were either led to suspect treachery, or were convinced that they were strong enough to help themselves without negotiation. They summoned soldiers from the ships, burned a number of houses, and carried off five hundred sheep. The Spaniard who was to have been their host, but who was now their prisoner. having informed them that the Viceroy of Peru had been for some months aware of their approach, and that a strong force was prepared at Lima to attack them. Spilbergen determined to go in search of the Spanish fleet. At Arica -the seaport to which the Potosi silver was brought to be shipped to Panama-they took a small ship laden with treasure. On the evening of the 16th of July the Spanish fleet of eight sail appeared in sight. The Jesu Maria, the flag-ship, had no less than four hundred and sixty men, and mounted twenty-four guns; and the whole squadron were in the same proportion better provided with men than artillery. Don Rodrigo de Mendoça was the commander. About ten at night the Spanish and Dutch admirals closed. The night becoming very dark, the fleets were gradually separated. The next morning five of the Spanish ships sent word to their admiral that they were going to escape if they could. The Spanish admiral and vice-admiral were lashed together for mutual support, and were, in this condition, attacked by the Dutch. The Spanish seamen several times hung out a white flag in token of surrender, which was as often cut down by their officers, who chose rather to die than yield, especially as they had sworn to the Viceroy of Peru to bring him all the Hollanders in chains. At nightfall the Spanish admiral's ship cut herself loose and fled from pursuit; but her leaks and damages were so serious that she went to the bottom before dawn. This decided the victory in

favour of the Dutch. The victorious fleet sailed directly for Callao; and proceeding to the north, on the 11th of October entered the harbour of Acapulco, in Mexico or New Spain. Negotiations were entered into and a treaty was made, the Dutch agreeing to release all their prisoners, and the Spanish to furnish them with oxen, sheep, poultry, fruit, water, and wood.

On the 23d of January 1616, they came in sight of the Ladrones, where they stopped two days to traffic with the natives for flesh, fish, fruit, and fowl. On entering the Straits of Manilla, they gained intelligence of a fleet of twelve ships and four galleys, manned by two thousand Spaniards, besides Indians and Chinese, sent to drive their countrymen from the Moluccas and to reduce these islands to the dominion of Spain. On this news they discharged all their prisoners, and made preparations to meet the Manilla fleet and to proceed to the assistance of their friends. To the great joy of their countrymen, they arrived on the 29th of March at Ternate, one of the principal islands of the group, where the Dutch possessed a trading-station.

Spilbergen was now detained nine months in the Molucca and neighbouring islands, in the service of the East India Company. He left the ships in which he had hitherto sailed in India, and returned to Holland in the Amsterdam. His voyage produced no new discoveries in the South Sea; but the Directors of the Company bestowed upon him the highest praise for his prudent management and timely energy. The Company may be said to have dated their grandeur from the day of his return, both as regards power and wealth,—the first resulting from his successful circumnavigation of the globe, the latter from their conquests in the Moluccas, in which he took a prominent part, and of which he brought home the first intelligence.

The Dutch East India Company held from the Government the exclusive privilege of trading in the Great South Sea,—all private citizens being prohibited from entering those waters by the Cape of Good Hope on the east or the Strait of Magellan on the west. This prohibition stimulated rather than checked the commercial ardour of the country, and it soon became the study of navigators and merchants to discover some safe means of eluding the law, it being hard, they said, that Government should close up the channels which Nature had left free. Isaac Lemaire, a rich trader of Amsterdam, was the first to whom the idea occurred of seeking another passage from the Atlantic to the Pacific than the Strait of Magellan. He imparted his views to William Cornelison Schouten, who had been three times to the East Indies in the different capacities of supercargo, pilot, and master. He too was convinced that to the south of Terra del Fuego lay another passage from one ocean to the other. Could they find this passage, they might legally trespass upon the monopoly held by the Company. They determined to attempt the discovery, and Lemaire advanced half the necessary funds, Schouten and his friends furnishing the other half. Two ships were fitted out, the larger,the Concord,-of three hundred and sixty tons, being manned by sixty-five men, and pierced for twenty-nine guns of small calibre; the Horn, of one hundred and ten tons, carrying eight cannons, four swivels, and twenty-two men. Schouten was master and pilot of the expedition, and James Lemaire, the son of Isaac, supercargo. The object of the voyage was kept a profound secret, the officers and men being bound by their articles to go wherever they should be required. The little fleet was equipped in the port of Horn, and left the Texel on the 14th of June 1615, proceeding towards the coast of Africa.

Late in October the ships' companies were informed of the design of the voyage, and readily consented to engage in a scheme which promised both distinction and emolument. Early in December they made the coast of Patagonia, some three hundred miles to the north of Magellan's Strait. Here the Horn, the smaller of the two vessels, caught fire by accident and was destroyed. Her iron-work, guns, and anchors were transferred to the Concord. On the

24th the Concord passed the Strait of Magellan, and was soon in the latitude where Schouten and Lemaire hoped to make their grand discovery. While Terra del Fuego was still in sight upon their right hand, they noticed a high rugged island upon their left, which they named Staten Land, or Land of the States. The ship passed between the two, and soon after rounded the promontory which advanced the farthest into the sea, to which, in honour of the port from which the expedition had sailed. Schouten gave the name of Cape Horn. He then launched into the South Sea, being the first who passed completely round the South American continent. Lemaire claimed the honour of giving his name to the strait which had brought them to the Cape,-one which clearly belonged to Schouten, as the leader and pilot of the expedition. The strait is still known by the name of the supercargo, geographers having consecrated, by silence, this manifest act of injustice.

Altering their course to the northward, they soon recognised the mouth of Magellan's Strait,—which rendered their discovery complete. Schouten then made for the island of Juan Fernandez, where he hoped to give rest and refreshment to his sickly and wearied crew. The currents and the winds would not permit him to land ; and he was compelled to start across the Pacific in a crazy ship and with a disabled company.

Early in July 1616 they arrived at the Moluccas, and went on shore upon the island of Gilolo, where they procured poultry, tortoises, rice, and sago. They next touched at Ternate, where they were kindly entertained by the Dutch authorities. They then sailed for Java, and cast anchor in the harbour of Jacatra—now Batavia—sixteen months after quitting the Texel, having lost but three men upon the voyage. The expedition properly terminates here ; for Jan Petersen Cohen, President for the Dutch East India Company at Bantam, in Java, confiscated their ship and cargo as forfeited for illegally sailing within the boundaries of the company's charter. He sent Schouten and Lemaire to Holland, however, that they might plead their cause before a competent court. Lemaire died on his way home, overcome with grief and vexation at the disastrous end of a voyage which had been so successful till the seizure of the ship. Schouten made several subsequent voyages to the East Indies, and died in 1625, in the island of Madagascar. His name is little known, and his memory has almost passed away, although to him clearly belongs the credit of improving upon Magellan's discovery by furnishing a safer route to the commerce of the world, and substituting the doubling of Cape Horn for the threading of the Strait.

During this same year the English made their last attempt for nearly two centuries in the Arctic waters. William Baffin, who had accompanied Hudson in one of his earlier voyages, embarked in the capacity of pilot on board the Discovery, commanded by one Robert Bylot. The crew consisted of fourteen men and two boys. Passing through Davis' Strait, they came to the vast bay which now bears Baffin's name. They found it to be eight hundred miles long and three hundred wide. They ascended to the north as far as the seventy-eighth degree of latitude, where the bay seemed to taper off in a strait or sound, which they called Thomas Smith's Sound. Here Baffin observed the greatest variation of the needle known at that time-fiftysix degrees to the west. The charts of Baffin are lost; but several of his journals are extant, and contain numerous astronomical and hydrographic observations, which have since been fully verified by the superior instruments of modern science. Baffin saw the opening to the west. which Ross, two centuries later, was to call Lancaster Sound, and through which Parry was to penetrate to Melville Island and to the Polar Sea. He was convinced that a north-west passage existed, though he never made a second voyage in search of it. These icy coasts remained unvisited till the middle of the 18th century, when English navigators were roused into fresh activity by the reward offered by Parliament-£20,000 to him who should sail to China by the north-west.

SECTION IV.

FROM THE DISCOVERY OF CAPE HORN TO THE ARCTIC EXPLORATIONS.—A.D. 1616-1854.

CHAPTER IX.

THE MAYFLOWER—ABEL JANSEN—TASMAN—THE BUCCANEERS—WILLIAM DAMPIER.

WE have now to narrate the incidents of a voyage without precedent, in one point of view, in maritime annals, and to chronicle the adventures of a ship which, in some respects, may be said to have achieved a fame little inferior to that of any other that ever ploughed the ocean. We allude to the Mayflower, in which the Pilgrim Fathers proceeded from Southampton Water to Plymouth Rock. The details of the voyage, however, are few and unsatisfactory.

The Mayflower was built in England, at a time when English commerce could bear no comparison with that of Holland, and when the trade with the latter power employed six hundred Dutch ships to one hundred of English build. They were picturesque in appearance, though tub-like and clumsy, the hull being broad-bottomed and capacious, while the lofty cabins, towering high both fore and aft—a style now obsolete in Europe, but still prevailing in the Red Sea and the Levant—caused them to roll heavily in rough water. The Mayflower was a high-sterned, quaint, but staunch little vessel of one hundred and eighty tons, and was built for one of the trading companies lately chartered

169

by the Government. The Dutch portion of the emigration had already embarked at Delfthaven in the Speedwell, of sixty tons, and both vessels were, on the 1st of August 1620, anchored before the old towers of Southampton. The pilgrims were then regularly organized for the voyage, being distributed according to rules laid down and accepted by all. The larger number were, of course, received on board the Mayflower. On the 5th of August, both vessels weighed anchor, and sailed down the beautiful estuary of Southampton Water : passing the Isle of Wight and the rocks known as the Needles, they entered the English Channel.

They were no sooner launched upon the fretful waters of this confined strait than their disasters began. The captain of the Speedwell, who had engaged to remain a year abroad with the vessel, actuated either by cowardice or by dissatisfaction with the enterprise, declared that his ship was leaky, and that she could not proceed to sea. Dartmouth Harbour offered an opportunity for effecting the necessary repairs, and here a week was spent : the Speedwell was then pronounced quite sound by the carpenters and surveyors. They again set sail; but the captain of the Speedwell soon profited by the vicinity of Plymouth to assert a second time that he was ready to founder. He ran into port, and the Mayflower followed. No special cause was discovered for the apprehensions of the captain ; but it was decided that the Speedwell should be sent back to London as unseaworthy. with such of her passengers as were disheartened, the remainder being transferred to the larger ship. One hundred and one persons-some of them aged and infirm, and several of them women soon to become mothers-were thus imprisoned, as it were, in a vessel much too small to accommodate them; while the delays resulting from the treachery or stratagem practised by the captain of the Speedwell had already proved so serious, that it was the 6th of September before the Mayflower, with her crowd of suffering passengers, could continue the voyage thus inauspiciously commenced.

The wind was east by north, blowing, according to the journal, "a fine small gale," when the Mayflower started from Plymouth upon her lonely way. The solitude of the ocean ---in this latitude almost a trackless waste---lay stretched out before them. The prosperous gale soon gave way to the equinoctial storm, and a terrible head-wind from the north-west compelled the little bark to struggle anxiously with waves which threatened to engulf her. She was soon sorely shattered : her upper works were strained, and one of the main beams amidships was bent and cracked. A consultation was held between the seamen and passengers, and the question was seriously debated whether it would not be better to put back. It was fortunately discovered, how-ever, that one of the Dutch pilgrims had accidentally brought on board a large iron screw, and this served to rivet the defective beam. The ship proceeded on her course, struggling with westerly gales and tempestuous seas. For whole days together she was compelled to lie to, or to scud with bare poles. Only one death occurred during this terrible voyage-a loss in numbers which was made good by the birth of a boy, to whom was given the name of Oceanus Hopkins.

Sixty-four days had passed, and the 9th of November had dawned. Upon this date the tempest-tossed pilgrims obtained their first view of the American coast.

The Mayflower remained in Plymouth Harbour, and was the home of the women and children during the severe winter of 1620-21. She rode out the storm at her anchorage—though she was placed in great danger by a gale upon the 4th of February, her want of ballast—unladen as she was—rendering her light as a cockle-shell. With the opening of spring, the captain determined to return to England, and offered to carry back any of the colonists who might be disheartened by the calamities which had overtaken them—for they had buried half their number. But their sufferings had endeared the soil to them, and not one embraced the opportunity of returning. The Mayflower left Plymouth on the 5th of April 1621, and made the run home to London in thirty days.

The Council of the Dutch East India Company thought proper, in 1642, to order a complete and precise survey of the lands accidentally discovered during the previous fifty vears by vessels trading between Holland and Batavia, in Java. These had touched, at intervals, at numerous points upon the continental island of New Holland-Hertog at Endracht's Land in 1616, and De Witt, Van Nuyts, and Carpenter at other points, somewhat later. It was eminently desirable that a scientific navigator should visit and render an account of this region, of which only casual glimpses had thus far been obtained. Captain Abel Jansen Tasman was intrusted with this duty by Van Diemen, Governor-General of the Company. He left Batavia in August with two vessels, the Zeehaan and the Heemskirk, and proceeded towards the south and south-east. During this portion of the voyage the needle was in such continual agitation, unwilling to remain in any of the eight points and boxing the whole compass in twenty-four hours, that Tasman was led to believe large mines of loadstone to exist in the vicinity. On the 24th of November he discovered land, and gave to it the name of Van Diemen's Land-a name which, in honour of its discoverer, is now changed to Tasmania. Tasman set up a post, upon which every man of the company cut his name, and upon the top of which a flag was hoisted, and then set out in quest of the Solomon Islands, which he supposed to lie to the east.

On the 13th of September he discovered a high, mountainous country, to which he gave the name of Staten Land —Land of the States [of Holland]. Its present name is New Zealand. He coasted along the shore to the northeast, and anchored in a fine bay, though he did not disembark. The savages, who were shy at first, at last ventured on board the Heemskirk, in order to trade. Tasman, suspicious of their intentions, sent a boat with seven men from the Zeehaan, to put the crew of his consort upon their guard. These seven men, being without arms, were attacked, three of them were killed, and the other four forced to swim for their lives. The two vessels opened their fire upon the canoes of the islanders, and Tasman branded the spot with a name which still exists upon the charts—Murderers' Bay.

On the 21st of January 1643, he saw three islands, in latitude 21° south : he named them Amsterdam, Rotterdam, and Middlebourg. The inhabitants were peaceable and friendly, were unacquainted with the use of weapons, and very skilful in stealing. These are now the principal members of the group known as the Friendly Islands. They remained unvisited by Europeans from the time of Tasman, in 1643, to the second voyage of Cook in 1773 -a space of one hundred and thirty years. Cook found traditions still existing respecting Tasman's ships; and a nail was shown him which had been left by the Dutch navigator. Proceeding to the north and then to the west, Tasman discovered a group of twenty islands, girt with shoals and sands. He named them Prince William's Islands and Heemskirk's Shallows. These now form the eastern portion of the Feejee archipelago. They remained unvisited for a century and a half, until the people of the Friendly Islands spoke of them to Cook and his successors, and induced them to visit them.

Tasman now feared that the currents and winds had driven him more to the westward than he had supposed; for he had not seen the sun for many weeks, and was consequently without reliable observations. He resolved to make for the north, and then for the western coast of New Guinea, in order not to be driven to the south of the island and pass it without seeing it. On the 1st of April he saw the coast of what he supposed was New Guinea, but which was in reality New Britain.

On the 18th of May Tasman reached the western extremity of New Guinea, having sailed entirely round the continent or island of Australia. He arrived at Batavia, whence he had started, after an absence of ten months. His expedition was the clearest and most precise of the several voyages which had been made for the discovery of the Terra Australis Incognita : few voyages, since that of Magellan, had contributed more to geographical science ; for, by reducing the limits of the Terra Australis, as he did by circumnavigating the supposed continent, he did much to rid geography of its most important error.

Tasman made a second voyage in 1644; but his journals and his track have been completely lost. The portion of his discoveries relative to New Zealand and the Friendly Islands was completed by Cook; that relative to Van Diemen's Land by d'Entrecasteaux, in his voyage in search of La Perouse.

It is necessary to pause at this period in our review of the grand maritime expeditions which successively left the various seaports of the world, in order to refer to a practice which was now rendering commerce hazardous and the whole highway of the seas insecure-piracy. Besides the numerous isolated adventurers who preved upon the vessels of any and every nation which fell in their way, a powerful association or league of robbers, who infested particularly the West India Islands and the Caribbean Sea, and who bore the name of Buccaneers, became, during the century of which we are now speaking, the peculiar dread of Spanish ships. The Spaniards would not allow any other nation than their own to trade in the West Indies, and pursued and murdered the English and French wherever they found them. Every foreigner discovered among the islands or on the coast of the American continent was treated as a smuggler and a robber; and it was not long before they became so, and organized themselves into an association capable of returning cruelty by cruelty. The Spaniards employed coast-guards to keep off interlopers, the commanders of which were instructed to massacre all their prisoners. This tended to produce a close alliance, offensive and defensive, among the mariners of all other nations, who in their turn made descents upon the coasts and ravaged the weaker Spanish towns and settlements. A permanent state of hostilities was thus established in the West Indies, independent of peace or war at home. After the failure of the mines of St. Domingo and its abandonment by the Spaniards, it was taken possession of, early in the sixteenth century, by a number of French wanderers who had been driven out of St. Christopher; and their numbers were soon augmented by adventurers from all quarters.

As they had neither wives nor children, they generally lived together by twos for mutual protection and assistance : when one died, the survivor inherited his property, unless a will was found bequeathing it to some relative in Europe. Bolts, locks, and all kinds of fastenings were prohibited among them, the maxim of "honour among thieves" being considered a more efficient safeguard. The dress of a buccaneer consisted of a shirt dipped in the blood of an animal just slain, a leathern girdle in which hung pistols and a short sabre, a hat with feathers, but without a rim, except a fragment in guise of a visor to pull it on and off, and shoes of untanned hide, without stockings. Each man had a heavy musket and usually a pack of twenty or thirty dogs. Their business was, at the outset, cattle-hunting; and they sold hides to the Dutch who resorted to the island to purchase them. They possessed servants and slaves, consisting of persons decoyed to the West Indies and induced to bind themselves for a certain number of vears.

The Spaniards inhabiting other portions of St. Domingo conceived the idea of ridding the island of the buccaneers by destroying all the wild cattle; and this was carried into execution by a general chase. The buccaneers abandoned St. Domingo and took refuge in the mountainous and wellwooded island of Tortuga, of which they made themselves absolute lords and masters. The advantages of the situation brought swarms of adventurers and desperadoes to the spot; and from cattle-hunters the buccaneers became pirates. They made their cruises in open boats, exposed to all the inclemencies of the weather, and captured their prizes by boarding. They attacked indiscriminately the ships of every nation, feeling especial hostility and exercising peculiar cruelty towards the Spaniards. They considered themselves to be justified in this by the oppression of the Mexicans and Indians by Spanish rulers, and, quieting their consciences by thus assuming the character of avengers and dispensers of poetic justice, they never embarked upon an expedition without publicly offering up prayers for success, nor did they ever return laden with spoils without as publicly giving thanks for their good fortune.

They seldom attacked any European ships except those homeward bound-which were usually well freighted with gold and silver. The Spaniards held them in such terror that they usually surrendered on coming to close quarters. The spoil was equitably divided, provision being first made for the wounded. The loss of an arm was rated at six hundred dollars, and other wounds in proportion. The commander could claim but one share ; although, when he had acquitted himself with distinction, it was usual to compliment him by the addition of several shares. When the division was effected, the buccaneers abandoned themselves to all kinds of rioting and licentiousness till their wealth was expended, when they started in pursuit of new booty.

The buccaneers now rapidly increased in strength, daring, and numbers. They sailed in larger vessels, and undertook enterprises requiring great energy and audacity. Miguel de Basco captured, under the guns of Portobello, a Spanish galleon valued at a million of dollars. A Frenchman of the name of Montbars conceived so deadly a hatred for the Spaniards, and killed so many of them, that he obtained the title of "The Exterminator." But the fame of all the

buccaneer commanders was eclipsed by that of Henry Morgan, a Welshman. The boldest and most astonishing of his exploits was his forcing his way across the Isthmus of Darien from the Atlantic to the Pacific Ocean. His object was to plunder the rich city of Panama: his expedition. however, opened the way to the great Southern Sca, where the buccaneers laid the foundation of much of our geographical knowledge of that ocean. He first took the castle of San Lorenzo, at the mouth of the river Chagres, where out of three hundred and fourteen Spaniards he put two hundred to death. He left five hundred men in the castle, one hundred and fifty on board of his thirty-seven ships, and with the rest-who, after deducting the killed and wounded, amounted to about twelve hundred men-began his progress through a wild and trackless country which was then known only to the native Indians. After a desperate combat with the Spaniards, he took and plundered Panama, which then consisted of about seven thousand houses. He returned to the mouth of the Chagres with an enormous booty, and, after defrauding the fleet of their share of the spoils, sailed for Jamaica, which was already an English colony. He was made deputy-governor of the island by Charles II., by whom he was also knighted. He proved an efficient officer, and gave no quarter to the buccaneers 1

Morgan's expedition had pointed out a short way to the South Sea; and, in 1680, some three hundred English buccaneers started from the Atlantic side to cross the isthmus. They formed an alliance with the Darien Indians, who furnished them a quantity of canoes upon the Pacific side. Some of them remained a long time in the South Sea, and made many discoveries of undoubted benefit to mankind.

The Spaniards never dared to defend themselves unless they greatly outnumbered their assailants, and even then they were usually routed with ease. They revenged themselves upon the enemy by mangling and subjecting to mimic tor tures such dead bodies of the invaders as were left behind, —an exhibition of impotent rage which only excited the buccaneers to fresh cruelties.

One of the English buccaneers (William Dampier) became subsequently an eminent discoverer, author, and philosopher. After receiving a collegiate education, he went to sea in northern latitudes, which for a time disgusted him with a maritime life. A voyage to the East Indies, the superintendence of a plantation in Jamaica, and three years spent among the logwood-cutters of Campeachy, gave him a strong bias for the tropical waters. In Campeachy he became acquainted with some of the buccaneers, whose descriptions of their adventures kindled in him a fondness for a roving and piratical life. He joined an expedition under Captain John Cooke ; an English pilot named Cowley was engaged as master, and embarked in complete ignorance of the nature of the voyage. They sailed in August 1683 in the Revenge, mounting eight guns, and manned by fiftytwo men. Cowley was told the first day that the vessel's mission was trade, and her destination St. Domingo; on the second, he was informed that piracy was her object, and Guinea her market.

Stopping at the Cape Verd Islands, they resolved to go to Santiago, in the hope of finding some ship in the road, and intending to cut her cable and run away with her. They saw a ship at anchor, and approached her with hostile intent. They were not far off when her company struck her ports and ran out her lower tier of guns. Cooke bore away as fast as he could, convinced that he was unable to cope with a Dutch East Indiaman of fifty guns and four hundred men. Some time after, when off Sierra Leone, they fell in with a newly-built ship of forty guns, well furnished with water, provisions, and brandy, which they boarded and captured. They named her the Revenge, and continued their voyage in her, destroying their original vessel. From here they crossed the Atlantic to the Patagonian coast. They doubled Cape Horn during a tremendous storm of rain, which furnished them with twentythree barrels of fresh water. The weather was at this time so cold, that the men could drink three quarts of burnt brandy in twenty-four hours without being intoxicated. They joined company in the Pacific with the Nicholas of twenty-six guns, Captain John Eaton, and started together upon an attempt against the Peruvian coast. They captured three flour-ships, and learned from the prisoners that their presence was known to the Peruvian authorities. Their design upon the coast was therefore abandoned. They carried their prizes to the Gallapagos or Tortoise Islands, where they might store their captured provisions in a secure place. They arrived and anchored there on the 31st of May 1684.

Proceeding to the northward, they descried the coast of Mexico early in July, where Cooke, who had been ill for some months, died and was buried. Edward Davis, quartermaster, was elected captain in his stead. The two ships separated on the 2d of September, the Nicholas withdrawing from the partnership. Davis and Dampier remained in the Revenge, and were soon joined by the Cygnet, a richly-loaded vessel, designed for trading on this coast. They attacked Paita in the month of November, but found it evacuated. On the 1st of January 1685, they captured a package of letters sent by the President of Panama to hasten the captains of the silver-fleet from Lima, as the coast was believed to be clear. Being particularly desirous that the silver-fleet should share this belief, they suffered the letter-bearers to continue their voyage, and resolved to lie in wait for the ships. In the meantime they captured several prizes, and manned them with buccaneers that they met from time to time, engaged in small enterprises on separate accounts. By the end of May their fleet consisted of ten sail, two of them being ships of war, carrying fiftytwo guns and nine hundred and sixty men. The Spanish fleet, consisting of fourteen sail, eight of them men-of-war, and two of them fire-ships, the whole manned by three

thousand men, now hove in sight. The admiral of the fleet deceived the buccaneers at night by hoisting a light upon the topmast of an abandoned bark, by which they were decoyed into a position which gave the Spaniards the next day all the advantage of the wind. Thus was the grand scheme adroitly frustrated.

Having thus failed at sea, they agreed to try their fortune on land, and chose the city of Leon, on the coast of Nicaragua. Four hundred and seventy men were landed for this purpose. They were met and opposed by five hundred foot and two hundred horse, both of which arms of the service retreated in confusion at the first collision. As they refused to ransom the city for thirty thousand dollars, it was set on fire. A Spanish gentleman, who had been captured by the buccaneers, was released upon his promise to deliver one hundred and fifty oxen at Realejo, the next place which they intended to attack. Realejo was taken, but yielded them little of value except five hundred bags of flour, with some pitch, tar, and cordage, and the one hundred and fifty promised oxen. Captains Davis and Swan now agreed to separate, the former wishing to return to Peru, and the latter desiring to visit the northern coasts of Mexico. Dampier remained with Swan in the Cygnet.

Swan and Dampier were now convinced that the commerce of this region was not carried on by sea, but by land, by means of mules and caravans. They, therefore, resolved to try their fortune in the East Indies. They sailed from California on the 31st of March 1686. They made the island of Guam, after a voyage of six thousand miles, in seven weeks, having but three days' provisions left, and the men having begun to talk of eating Captain Swan when these were exhausted.

They learned here, from the friar belonging to the garrison, that Mindanao, one of the Philippine Islands, was very fertile and productive, and that the natives, who were Mohammedans, were at war with the Spaniards. They therefore resolved to go there, and left Guam on the 2d of June. After seeing Luzon (Matan), where Magellan was killed, they anchored off Mindanao, the largest of the Philippines with the exception of Luzon.

The Sultan of Mindanao received the strangers with favour, and would gladly have induced them to settle upon the island and form the nucleus of an English trading station. Dampier would have remained, but the majority were against him. After a time a mutiny broke out, and as Captain Swan manifested no energy or address in quelling it, he and thirty-six men were left at Mindanao, the rest escaping with the ship. Dampier here remarks that they had buried sixteen men upon the island, who had died by poison,—the natives revenging the slightest dalliance with their women with a deadly, though lingering, dose or potion. Some of the mutineers that ran off with the vessel died, of poison administered at Mindanao, four months afterwards. Read, the new captain, and Dampier, cruised for some time among the Philippine Islands.

On the 4th of January 1688, they touched at New Holland,—then known to be a vast tract of land, and by all except the Dutch supposed to be a continent. Here they found a miserable race of people, living on shell-fish. They were tall, straight-bodied, and thin, with small, long limbs. A bit of the rind of a tree and a handful of grass formed their only clothing. The crew landed several times, and brought the natives to some degree of familiarity by giving them a few old clothes ; but they could not prevail upon them to assist them in carrying water or any other burden. When the savages found that the ragged jackets and breeches which had been given them were intended to induce them to work, they took them off and laid them down upon the shore.

Dampier was now tired of wandering about the world with this mad crew, none of whom—not even the captain —had any settled purpose or object in view. Read was afraid that Dampier would desert, and when off Sumatra executed a scheme which he hoped would render it impos-

sible. He gave chase to a small sail which was discovered making for Acheen in Sumatra. Taking on board the four Malays who manned her and the cocoa-nuts with which she was laden, he cut a hole in her bottom and turned her loose. This he did in order to render Dampier and any others who might be disaffected afraid to trust themselves among a people who had been thus robbed and abused. At one of the Nicobar Islands, however, Dampier escaped, and two Englishmen and one Portuguese followed him. The four sailors of Acheen were also put ashore. The whole eight joined company, purchased a canoe, for which they gave an axe in exchange, and set off to row to Acheen. They had not proceeded half a mile before the canoe overset. They swam ashore, dragging the canoe and their chests, and spent three days in making repairs. The Achaneese fitted the canoe with that universal Polynesian apparatus,—an outrigger, or balancer, on each side,-by which capsizing is rendered impossible. They felled a mast in the woods and made a substantial sail with mats. They put off again, fol-lowing the shore for several days. At length they ventured forth upon the open sea, with one hundred and fifty miles of dangerous navigation before them. They rowed with four oars, taking their turns,-Dampier and Hall, one of the Englishmen, relieving each other at the tiller, none of the rest being able to steer. The current against them was very strong, so that, when looking in front for Sumatra, Nicobar, to their dismay, was still visible behind them. A dense halo round the sun, portending a storm, now caused great anxiety to Dampier. The wind freshened till it blew a gale, and they reefed the sail one-half of its surface. The light bamboo poles supporting the outriggers bent as if they would break ; and, if they had broken, the destruction of the boat would have been inevitable. Putting away directly before the wind, they ran off their course for six hours, the outriggers being very much relieved by this change of direction.

Dampier's description of this storm is graphic and quaint. "The sky looked very black," he writes, " being covered with dark clouds. The winds blew hard and the seas ran high. The sea was already roaring in a white foam about us,-a dark night coming on, and no land in sight to shelter us, and our little ark in danger to be swallowed by every wave : and, what was worst of all, none of us thought ourselves prepared for another world. I had been in many imminent dangers before now ; but the greatest of them all was but a play-game compared to this. I must confess that I was in great conflicts of mind at this time. Other dangers came not upon me with such a leisurely and dreadful solemnity : a sudden skirmish or engagement or so was nothing when one's blood was up and pushed forward with eager expectations. But here I had a lingering view of approaching death, and little or no hopes of escaping it; and I must confess that my courage, which I had hitherto kept up, failed me here. I had long ago repented me of my roving course of life, but never with such concern as now. I composed my mind as well as I could in the hope of God's assistance ; and, as the event showed, I was not disappointed of my hopes."

About eight o'clock in the morning one of the Malays cried out, *Pulo Way*, which Dampier and Hall took to be good English, meaning "Pull away." He pointed to the horizon, where land was just appearing in sight. This was the island of Pulo Way, at the north-west end of Sumatra. It lay to the south ; and, in order to make it with a strong west wind, "they trimmed their sail no bigger than an apron," and, relying upon their outriggers, made boldly for the shore, which they reached the next morning, the 21st of May. The supposed island turned out to be the Golden Mountain of Sumatra. They landed, and, after being hospitably received by the natives, arrived at Acheen early in June.

At this point the history of Dampier's adventures as a circumnavigator comes properly to an end. He published a narrative of his career, which he dedicated to Charles Montague, President of the Royal Society, and which brought him into favourable notice. His descriptions have been long admired for their graphic force; while his treatises on winds, tides, and currents show a remarkable degree of observation and science for that age of the world. We shall soon have pecasion to mention him again.

We must now refer to another species of piracy—privateering. England and France were at war; and private armed vessels, bearing commissions from James II. and William III. against the French, roved the seas and robbed all defenceless ships which fell in their way. They attacked even the vessels of Great Britain, and from privateers became pirates.

The English Government determined to suppress this nefarious practice. A proposition to purchase and arm a private ship for the service was received with favour, and several nobles, together with Bellamont and Colonel Richard Livingston of New York, contributed a fund of six thousand pounds sterling. Livingston recommended, to command the vessel, one William Kidd, who had been captain of a merchant-vessel sailing between London and New York, and of a privateer against the French. Kidd was placed in command, and Livingston became his security for the share he agreed to contribute-six hundred pounds sterling. To give character to the enterprise, a commission was issued under the great seal of England and signed by the king, William III., directed to, "the trusty and well-beloved Captain Kidd, commander of the ship Adventure Galley." This vessel carried thirty guns and sixty men. Kidd departed from Plymouth in April 1696, and arrived off the American coast in July following. He occasionally entered the port of New York, where he was cordially received, as he was considered useful in protecting its commerce. For this service the Assembly voted him the sum of two hundred and fifty pounds sterling.

He now added ninety-five men to his crew, who shipped to go to Madagascar in pursuit of pirates. He then sailed for the East Indies, and while on his way resolved, possess-

ing as he did a vessel manned and equipped like a frigate, to turn pirate himself. He seems to have found ready listeners in the licentious creatures of whom he had composed his crew. He arrived off the Malabar coast, in Hindostan, where he pillaged vessels manned by Indian, Arab, and Christian crews. He landed from time to time. burned settlements, murdered and tortured the inhabitants, and placed a price upon the heads of such persons as he thought their friends would ransom. He captured a merchantman named the Quedagh, and, refusing the offered ransom of thirty thousand rupees, sold her and her cargo at a pirates' rendezvous for forty thousand dollars. He exchanged the Adventure for a larger vessel, and established himself at Madagascar. Here he lay in ambush, plundering the flags of every nation. He made himself dreaded as a bloody, cruel, and remorseless bandit, from Malabar and the Red Sea across the Atlantic to the West Indies and the American coast. He arrived at New York in 1698, laden, it is asserted, with more spoil than ever fell to the lot of any other individual. He disembarked at Long Island, where he buried a quantity of gold, silver, and precious stones.

After satisfying his crew by such a division of the remainder as they considered equitable, he dismissed them, and had the audacity to appear in the streets of Boston in the dress of a gentleman of leisure. Bellamont, Governor of New York, met him, caused his arrest, and sent him to England for trial. He was executed on the 12th of May 1701.

Piracy did not disappear with Kidd. The coasts of the Carolinas were for a long time infested with freebooters, though at various times some fifty of them were hung in Charleston. But the decisive blow against them was struck in 1723. The British man-of-war Greyhound captured a craft with twenty-five men and carried them into Rhode Island. They were tried, found guilty, and hung at Newport in July. This was the end of piracy in the American waters.

CHAPTER X.

WOODES ROGERS — ALEXANDER SELKIRK — DAMPIER — DUTCH WEST INDIA COMPANY—JACOB ROGGEWEIN— VITUS BEHRING.

A COMPANY of merchants of Bristol fitted out two ships in 1708—the Duke and Duchess—to cruise against the Spaniards in the South Sea. The Duke was commanded by Woodes Rogers, the Duchess by Stephen Courtney. William Dampier, whose name had long been a terror to the Spaniards, was pilot to the larger ship. They left Bristol on the 14th of July, with fifty-six guns and three hundred and thirty-three men, and with double the usual number of officers, in order to prevent the mutinies so common in privateers.

Nothing of moment occurred till the vessels anchored at Isola Grande, off the coast of Brazil. Here two men deserted, but were so frightened in the night by tigers, as they supposed, but in reality by monkeys and baboons, that they took refuge in the sea and shouted till they were taken on board. The two ships passed through Lemaire's Strait and doubled Cape Horn, and on the 31st of January 1709, made the island of Juan Fernandez. During the night a light was observed on shore, and Captain Rogers made up his mind that a French fleet was riding at anchor, and ordered the decks to be cleared for action. At daylight the vessels stood in towards the land ; but no French fleet-not even a single sail-was to be seen. A yawl was sent forward to reconnoitre. As it drew near, a man was seen upon the shore waving a white flag; and, on its nearer 186

approach, he directed the sailors, in the English language, to a spot where they could best effect a landing. He was clad in goat-skins, and appeared more wild and ragged than the original owners of his apparel. His name has long been known throughout the inhabited world, and his story is familiar in every language. We need hardly say that his name was Alexander Selkirk, and that his adventures furnished the basis of the romance of Robinson Crusoe.

Alexander Selkirk was a Scotchman, and had been left upon the island by Captain Stradling, of the Cinqueports, four years and four months before. During his stay he had seen several ships pass by, but only two came to anchor at the island. They were Spaniards, and fired at him ; but he escaped into the woods. He said he would have surrendered to them had they been French ; but he chose to run the risk of dving alone upon the island rather than fall into the hands of Spaniards, as he feared they would either put him to death or make him a slave in their mines. "He told us," says Rogers, "that he was born in Largo, in the county of Fife, and was bred a sailor from his youth. The reason of his being left here was a difference with his captain, which, together with the fact that the ship was leaky, made him willing to stay behind. He took with him his clothes and bedding, with a firelock and some powder and bullets, some tobacco, a knife, a kettle, a Bible, with other books, and his mathematical instruments. He diverted himself and provided for his sustenance as well as he could, but had much ado to bear up against melancholy for the first eight months, and was sore distressed at being left alone in so desolate a place. He built himself two huts of pimentotrees, thatched with long grass and lined with goat skins,--killing goats as he needed them with his gun, as long as his powder lasted. When that was all spent, he procured fire by rubbing two sticks of pimento wood together. He slept in his large hut and cooked his victuals in the smaller, and employed himself in reading, praying, and singing psalms,so that, he said, he was a better Christian during his solitude than he had ever been before, or than, he was afraid, he should ever be again."

Captain Rogers remained here a fortnight, refitting his ship. The "governor," as his men called Selkirk, never failed to procure two or three goats a day for the sick. They boiled up and refined eighty gallons of seal oil, in order to save their candles. On the 14th of February the anchors were weighed, Alexander Selkirk shipping on board the Duke as second mate.

When off the Lobos Islands they took a prize, which they named The Beginning. They learned from their prisoners that the widow of the late Viceroy of Peru was soon to embark at Callao for Acapulco, with her family and riches; and they determined to lie in wait for her. In the meantime they landed and took the town of Guayaquil, but consented to its ransom for thirty thousand dollars. They also seized thirteen small vessels, from which they took meal, onions, quinces, pomegranates, oil, indigo, pitch, sugar, gunpowder, and rice.

At the Gallapagos Islands they laid in a large stock of sea-turtles and land-tortoises, some of the former weighing four hundred pounds, while the latter laid eggs in profusion upon the decks. Some of the men affirmed that they had seen one four feet high, that two of the party had mounted on its back, and that it easily carried them at its usual slow pace, not appearing to regard their weight. This monster was supposed to weigh seven hundred pounds at least.

Having made the coast of Mexico, and having determined to wait only eight days either for the Manilla galleon or the ship of the viceroy's widow, they were rejoiced to decry, on the morning of the 22d of December, the Spanish treasure-ship on the weather bow. She had barrels hung at her yard-arm, which seemed to warn the English of an explosion if they attempted to board. The engagement commenced at eight, and lasted an hour, after which she struck and surrendered. The prize was named The Bachelor, and she was equipped as a member of the squadron, which now sailed immediately for the Ladrone Islands.

They arrived at Guam on the 10th of March 1710, where their wants were amply supplied, cocoa-nuts being furnished in abundance at the rate of one dollar a hundred. At the Cape of Good Hope they joined a number of homeward-bound ships, and sailed in company, early in April, forming a fleet of sixteen Dutch and nine English ships. Rogers and his consorts anchored at Erith, in the Thames, on the 14th of October.

This voyage is the last in which Dampier is known to have been engaged, and what became of him afterwards has never been ascertained. It would not be easy to name, before the time of Cook, a navigator to whom the merchant and mariner are so much indebted. His style was unassuming, as free from affectation as was the narrative itself from invention. Dean Swift made Captain Lemuel Gulliver hail Dampier as cousin.

The outfit of this voyage amounted to £15,000, and the gross profits to £170,000. One-third of this, or £57,000, was divided among the officers and seamen. In view of this enormous return for a two years' voyage, we can hardly wonder at the fact that in this age, and during a long succeeding period, nearly all navigation was privateering, and that all ventures upon the seas appear to the reader of the present day as little better than the marauding excursions of corsairs and buccaneers.

The monopoly of the Dutch East India Company had been somewhat disturbed, as early as the year 1621, by the formation and charter of the Dutch West India Company. The latter held the exclusive commerce of the African coast from the Tropic of Cancer to the Cape of Good Hope, and that of the American coast both upon the Atlantic and Pacific Oceans. In 1674 its power and influence were somewhat extended by a fresh grant of privileges and an increase of capital. It was necessary for any one proposing a new scheme of commerce within the limits under their control, to apply to the Company for permission to execute A mathematician, of the name of Roggewein, a native it. of the province of Zealand, formed a project, in 1696, for the discovery of the vast continent and islands supposed to exist in the south under the name of Terra Australis Incognita. He died, however, before any step was taken by the Company in furtherance of his designs. His son, Jacob Roggewein, renewed the application in 1721, presenting a memorial, in accordance with which immediate orders were given for equipping three vessels-the Eagle, of thirty-six guns, the Tienhoven, of twenty-eight, and the African galley, of fourteen. Roggewein was made admiral, and 271 men were embarked upon the three ships, which sailed from the Texel on the 21st of August 1721.

They had a long and painful passage across the Atlantic —the crews suffering from heat, hunger, thirst, and the scurvy. Many of the men had high fevers, and some of them fits like the epilepsy. During a terrible hurricane on the 21st of December, the Tienhoven parted company, and the Eagle and the African galley kept on together as far as the Strait of Magellan. In this latitude Roggewein saw the group of islands which a French privateer had named Islands of St. Louis, but which some Dutch traders had subsequently called the New Islands. On arriving at the island of Juan Fernandez, Roggewein was surprised and rejoiced to see the Tienhoven safe at the rendezvous.

After a considerable run to the westward, Roggewein discovered, on the 14th of April 1722, an island sixteen leagues in extent, to which he gave the name of Easter Island in commemoration of the day. This was one of the most important discoveries ever made in the Pacific; and Easter Island is, for many reasons, one of the most famous oases in that desert of water. He intended to land with a sufficient force to make a general survey; but a west wind forced him from his anchorage and drove him out to sea.

He soon found himself in the wide tract which had

obtained the name of Bad Sea, on account of the brackish water of one of its islands. Through this region he sailed eight hundred leagues, and by a change of wind was driven with his consorts among a number of islands, by which they were considerably embarrassed. The Africa, which drew the least water, was sent in advance, but soon got upon the rocks and fired signals of distress. Night came on, and the natives, alarmed by the reports, kindled fires and came in crowds to the shore. The Dutch, whose confusion of mind seems to have been extreme, fired upon them without ceremony, that they might have as few dangers as possible to contend with at once. In the morning the Africa was found to be jammed between two rocks, from whence she could not be disengaged. She was therefore abandoned. The island upon which she was lost was named Pernicious Island. Five men deserted here, and were left behind. Eight leagues from Pernicious, an island, discovered at daybreak, was named Aurora ; and another, seen at sunset, was called Vesper. At another, which they named the Island of Recreation, a party sent on shore for salad and scurvygrass for the sick had so desperate an encounter with the natives, that, when a second landing was proposed, not a man could be prevailed on to make the dangerous attempt.

Roggewein was now convinced that no Terra Incognita was to be discovered in the latitude he had kept, and therefore resolved, in accordance with his instructions, to return home by way of the East Indies. His crews were so reduced that a further loss of twenty men would compel him to abandon one of his remaining vessels. The officers regretted this decision ; for they were anxious to visit the lands named Solomon's Islands by Mendana on account of their supposed wealth ; but they were now compelled to return by way of New Britain, the Moluccas, and the East Indies.

Not far from Recreation Island, a group was discovered by the captain of the Tienhoven, and was named from him Bowman's Islands. These islands are supposed to have been the most northerly of the Society Islands.

During the long run to New Britain, the frightful effects of bad provisions were made painfully manifest, for the salt meat had long been decayed, the bread was full of maggots, and the water intolerably putrid. The scurvy began to cut off four and five men a day. Cries and groans were incessantly heard in all parts of the ship : those who were well fainted at the stench of the carcases. Some were reduced to skeletons, so that the skin cleaved to their bones, while others swelled to a monstrous and disgusting size. The journal says that "an Anabaptist of twenty-five years old called out continually to be baptized, and when told, with a sneer, that there was no parson on board, became quiet, and died with great resignation." At last the high land of New Britain put an end to their miseries, for which there was no cure on earth except fresh meat, green vegetables, and pure water. The expedition intrusted to Roggewein thus proved abortive by the failure to find a Southern continent.

We come now to the first expedition at sea made by Russia for the purpose of extending and promoting the science of geography. Vitus Behring was a Dane in the Russian service, having been tempted by the encouragements held out to foreign mariners by Peter the Great. He had risen to the rank of captain in 1725, when the Empress Catherine, who was anxious to promote discovery in the north-cast of Asia and to settle the question, then doubtful, as to the existence of a strait between Asia and America, appointed him to the command of an expedition fitted out for that purpose. During a period of seven years, having travelled overland to Kamschatka, he explored rivers, sounded and surveyed the coasts, and sailed as far to the northward as the season and the strength of his very inferior boats would permit In 1732 he was made captain-commander, and the next year was ordered to con-duct an expedition fitted out on a very extensive scale for purposes of discovery. In 1740 he reached Okhotsk, where

vessels had previously been built for him. He sailed for Awatska Bay, where he founded the settlement of Petropaulowski, known in English as the Harbour of Peter and Paul. Sailing to the northward, he landed upon the American coast, giving name to Mount St. Elias, and then, returning to the westward, struck the continent of Asia, finding a strait fifty miles wide between the two continents at the point where they approach each other the nearest. This, in honour of its discoverer, is called Behring's Strait.

It is not improbable that Behring passed to the north of East Cape, the promontory on the Asiatic side, into the Arctic Ocean beyond. He was soon compelled to return, owing to the disabled condition of his vessel, which was wrecked upon an island on the 3d of November 1741. This island, which was little better than a naked rock, afforded neither food nor shelter; and Behring, suffering from the scurvy and sinking from disappointment, lay down in a cleft of the rock to die. The sand collected and drifted about him, half burying him alive. He would not suffer it to be removed, as it afforded him a grateful warmth. He died in this wretched condition on the 8th of December. The next summer, the few of his crew who survived the winter built a vessel from the timber of the wreck : in this they reached Kamschatka and made known the miserable fate of their commander.

Though Behring settled the fact of the existence of the strait which bears his name, it was reserved for Captain Cook to survey the entire length of both coasts. This he did with a precision and accuracy which left nothing for after-voyagers to perform, and which has made the geography of this remote and barbarous region as familiar as that of the Atlantic shores of America. The island upon which Behring died, and which was then uninhabited and without a shrub upon its surface, is now an important trading station, and affords comfortable winter quarters to vessels from Okhotsk and Kamschatka

CHAPTER XI.

GEORGE ANSON-ANTOINE DE BOUGAINVILLE.

In consequence of war having been declared betwixt Great Britain and Spain in 1739, an expedition was fitted out in England to attack the distant possessions of Spain in America, and especially in Peru. A fleet of six vessels, manned by fourteen hundred men and accompanied by two victualling ships, was accordingly placed under the command of George Anson, a captain in the naval service. The flag-ship was the Centurion, mounting sixty guns and carrying four hundred men. On their way out from Spithead, on the 18th of September 1740, the fleet was joined by a large convoy of trading ships, which were to keep them company a portion of the way—numbering in all eleven men-of-war and one hundred and fifty sail of merchantmen.

The squadron passed through Lemaire's Strait on the 7th of March 1741. The sternmost ships were no sooner elear of the Strait than the tranquillity of the sky was suddenly disturbed, and all the presages of a threatening storm appeared in the heavens and upon the waters. The winds were let loose upon the unfortunate fleet, and for three long months blew upon them with unrelenting fury. The Severn and Pearl parted company and were never seen again. During the month of April forty-three of the crew of the Centurion died of the scurvy ; and during the passage from the Strait to the island of Juan Fernandez, the flag-ship lost by this disease, by accident, and by tempest,

194

two hundred and fifty men; and she could not at last muster more than six foremast-men capable of doing duty. On the 22d of May a terrific hurricane from the starboard quarter split all her sails and broke all her standing rigging, endangered the masts, and shifted the ballast and stores. The air was filled with fire, and the officers and men upon the decks were wounded by exploding flashes which coursed and darted from spar to spar.

Thus crippled and disabled, with five men dying every day, and not ten of the crew able to go aloft, the Centurion, separated from her consorts, and supposing them to have perished in the storm, made the best of her weary way to the island of Juan Fernanciez, where she arrived at daybreak on the 9th of June, after losing eighty more men from the scurvy.

In his description of the island, Anson speaks of the former residence of Alexander Selkirk upon it, and says, "Selkirk tells us, among other things, that, as he often caught more goats than he wanted, he sometimes marked their ears and let them go. This was about thirty-two years before our arrival at the island. Now it happened that the first goat that was killed by our people had his ears slit; whence we concluded that he had doubtless been formerly under the power of Selkirk. He was an animal of a most venerable aspect, dignified with an exceeding majestic beard and with many other symptoms of antiquity."

The Centurion was soon joined by the Tyrol sloop of war, by the Gloucester, and the victualler Anna Pink : the other members of the squadron were never heard of again. While refitting, a sail was discovered upon the distant horizon, and the Centurion started out in pursuit of her. She surrendered without delay, and proved to be the Monte Carmelo, bound from Callao to Valparaiso, with a cargo of sugar and blue cloth, and eighty thousand dollars in Spanish coin. The Centurion then returned with her prize to Juan Fernandez. The repairs upon all the vessels were hastily completed, and, while they were sent to cruise in different directions in search of Spanish merchantmen, the Centurion and the Carmelo sailed, on the 19th of September, for the general rendezvous at Valparaiso.

In November Anson determined to attack the seaport of Paita, in Peru. The town was taken with the utmost ease, and speedily reduced to ashes. The loss of the Spaniards by the fire, in broadcloths, silks, velvets, cambrics, was represented by them to the court of Madrid as amounting to £300,000. Anson's ships carried away with them, in plate, cona, and jewels, about £30,000 more. Soon after leaving Paita they fell in with a launch laden with jars of cotton. The people on board said they were very poor; but, as they were found dining on pigeon pie served up in silver dishes, it was thought advisable to search for the sources of this opulence. The jars of cotton were found to contain about £12,000 in double doubloons.

Anson now determined to steer for the southern parts of California, there to cruise for the galleon due at Acapulco from Manilla towards the middle of January. He did not arrive there till the 1st of February 1742; but being assured by some of his Spanish prisoners that the galleon was often a month behind her average time, he stood on and off, waiting with feverish impatience for an arrival whose value he estimated in round millions. He soon learned from some negroes whom he captured, that the galleon had arrived on the 9th of January. They added, however, that she had delivered her cargo, and that the Viceroy of Mexico had fixed her departure from Acapulco, on her return, for the 14th of March. This news was joyfully received by Anson and his men, as it was much more advantageous for them to seize the specie which she had received for her cargo than to seize the cargo itself.

It was now the 19th of February, and the galleon was not to leave port till the 14th of March, or, according to the old style, followed by Anson, the 3d of March. The interval was employed in scrubbing the ships' bottoms, in bringing them into the most advantageous trim, and in regulating the orders, signals, and positions to be observed when the famous ship should appear in sight.

The 3d of March passed without bringing news of the galleon. A fortnight went by; and Anson at last came to the conclusion that his presence upon the coast had been discovered, and that an embargo had been laid upon the object of their hopes. He afterwards discovered that his presence was suspected, and that the wary Spaniards had frustrated his schemes by detaining the galleon till the succeeding year. The admiral gave orders for the departure of the fleet from the American coast, in prosecution of the plans drawn up previous to his leaving England. He sailed early in May with the Centurion and Gloucester only, having scuttled and destroyed his three prizes on the enemy's coast.

A terrible attack of scurvy soon reduced both vessels to half their working force, and a storm of unusual violence completely disabled the Gloucester. She held out, however, till the middle of August, when her stores, her prize-money, and her sick were with great difficulty removed to the Centurion, which was herself in a crazy and well-nigh desperate condition. The Gloucester was set on fire, lest her wreck might fall into the hands of the Spaniards.

The Centurion kept on her way, losing eight, nine, and ten men every twenty-four hours. A leak was discovered, which all the skill of the carpenters failed to stop. The ship and men were in a condition bordering on positive despair.

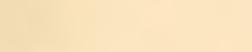
On the 27th of August, the Centurion came in sight of a fertile and (as Anson supposed) inhabited island, which he afterwards found to be one of the Ladrones, and named Tinian. Fearing the inhabitants to be Spaniards, and knowing himself to be incapable of defence, Anson showed Spanish colours, and hoisted a red flag at the foretopmast head, intending by this to give his vessel the appearance of the Manilla galleon, and hoping to decoy some of the islanders on board. The trick succeeded, and a Spaniard and four Indians were easily taken with their boat. The Spaniard said the island was uninhabited, though it was one of an inhabited group : but that the Spaniards of the neighbouring station of Guam used it as a storehouse and granary from whence they drew inexhaustible supplies. On landing, Anson at once converted a storehouse filled with jerked beef into an hospital for the sick : in this he deposited one hundred and twenty-eight of his invalids. The salutary effect of land-treatment and vegetable food was such that, though twenty-one died on the first day, only ten others died during the two months that the Centurion remained at anchor in the harbour.

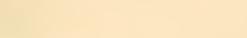
Anson gives a romantic account of the happy island of Tinian. The vegetation was not luxuriant and rank, but resembled the clean and uniform lawns of an English estate. Three thousand cattle, milk-white with the exception of their ears, which were black, grazed in a single meadow. The island also produced in abundance the very best specifics for scorbutic disorders, and the inlets furnished fish of plethoric size and inviting taste.

On the night of the 22d of September a violent storm drove the Centurion from her anchorage, sundering her cables like packthread. Anson was on shore, down with the scurvy; several officers, and a large part of the crew, amounting in all to one hundred and thirteen persons, were on shore with him. This catastrophe reduced all, both at sea and on land, to the utmost despair : those in the ship were totally unprepared to struggle with the fury of the winds, and expected each moment to be their last; those on shore supposed the Centurion to be lost, and conceived that no means were left them ever to depart from the island. As no European ship had probably anchored here before, it was madness to expect that chance would send another in a hundred ages to come. Besides, the Spaniards of Guam could not fail to capture them ere long, and, as their letters of marque had gone in the Centurion, they would undoubtedly be treated as pirates.















ANSON'S ADVENTURE ON THE HAPPY ISLAND.

During a storm, while Anson and one hundred and thirteen of his crew were ashers, the Centarion broke from her anchorage, sundering her cables like packthread. To effect their escape, they must haul the Spanish bark, which they had captured on their arrival, ashore, saw her asunder, lengthen her twelve feet—which would give her forty tons' burden and enable her to carry them all to Chma. Trees were felled and sawed into planks, Anson vorking with axe and ndze as vieronaly as any of his men—PAcas 199.

In this desperate state of things, Anson, who preserved his usual composure, projected a scheme for extricating himself and his men from their forlorn situation. In case the Centurion did not return within a week, he said, it would be fair to conclude, not that she was wrecked, but that she had been driven too far to the leeward of the island to be able to return to it, and had doubtless borne away for Macao. Their policy, therefore, was to attempt to join her there. To effect this, they must haul the Spanish bark, which they had captured on their arrival, ashore, saw her asunder, lengthen her twelve feet-which would give her forty tons' burden and enable her to carry them all to China. The carpenters, who had been fortunately left on the island, had been consulted, and had pronounced the proposal feasible. The men saw the necessity of active co-operation, and went zealously to work.

The blacksmith, with his forge and tools, was the first to commence his task; but unhappily his bellows had been left on board the ship. Without his bellows he could get no fire ; without fire he could mould no iron ; and without iron the carpenters could not rivet a single plank. But the cattle furnished hides in plenty, and these hides were imperfectly tanned with the help of a hogshead of lime found in the jerked-beef warehouse : with this improvised leather, and with a gun-barrel for a pipe, a pair of bellows was constructed which answered the intention tolerably well. Trees were felled and sawed into planks, Anson working with axe and adze as vigorously as any of his men. The juice of the cocoa-nut furnished the men a natural and abundant grog, and one which did not intoxicate them, but kept them temperate and orderly. When the main work had been thus successfully started, it was found, on consultation, that the tent on shore, some cordage accidentally left by the Centurion, and the sails and rigging already belonging to the bark, would serve to equip her indifferently when she was lengthened. Two disheartening circumstances were now discovered : all the gunpowder which could be collected

by the strictest search amounted to just ninety charges considerably less than one charge apiece to each member of the company : their only compass was a toy, such as are made for the amusement of school-boys. Their only quadrant was a crazy instrument which had been thrown overboard from the Centurion with other lumber belonging to the dead, and which had providentially been washed ashore. It was examined by the known latitude of the island of Tinian, and answered in a manner which convinced Anson that, though very bad, it was at least better than nothing.

On the 9th of October-the seventeenth day from the departure of the ship-matters were in such a state of forwardness that Anson was able to fix the 5th of November as the date of their putting to sea upon their voyage of two thousand miles. But a happier lot was in store for them. On the 11th, a man working on a hill, suddenly cried out in great ecstasy, " The ship ! the ship !" The commodore threw down his axe and rushed with his men-all of them in a state of mind bordering on frenzy-to the beach. By five in the afternoon the Centurion-for it was she-was visible in the offing : a boat with eighteen men to reinforce her, and with meat and refreshments for the crew, was sent off to her. She came happily to anchor in the roads the next day, and the commodore went on board, where he was received with the heartiest acclamations. The vessel had, during this interval of nineteen days, been the sport of storms, currents, leakages, and false reckonings ; she had but one-fourth of her complement of men; and when by a happy accident of driftage, she came in sight of the island, the crew were so weak they could with difficulty put the ship about. The reinforcement of eighteen men was sent at the very moment when in sight of the long-wished for haven, the exhausted sailors were on the point of abandoning themselves to despair.

Fifty casks of water, and a large quantity of oranges, lemons, and coccoa-nuts were now hastily put on board the Centurion. On the 21st of October the bark (so lately the object of all the commodore's hopes and fears) was set on fire and destroyed. The vessel then weighed anchor, and took leave of the island of Tinian,—an island which, in the language of Anson, "whether we consider the excellence of its productions, the beauty of its appearance, the elegance of its woods and lawns, the healthiness of its air, and the adventures it gave rise to, may in all these views be justly styled romantic." After a smooth run of twenty days, the Centurion came to an anchor on the 12th of November, in the roads of Macao,—thus, after a fatiguing cruise of two years, arriving at an amicable port and in a civilized country, where naval stores could be procured with ease.

The Centurion remained more than five months at Macao, where she was careened, thoroughly overhauled, and refitted. The crew was reinforced by entering twenty-three men, some of them being Lascars, or Indian sailors, and some of them On the 19th of April the admiral got to sea, Dutch. having announced that he was bound to Batavia and from thence to England. But his real design was to cruise off the Philippine Isles for the returning Manilla galleon. Indeed, as he had the year before prevented the sailing of the annual ship, he had good reason to believe that there would this year be two. He therefore made all haste to reach Cape Espiritu Santo, the first land the galleons were accustomed to make. They were said to be stout vessels, mounting forty-four guns and carrying five hundred hands ; while he himself had but two hundred and twenty-seven hands. thirty of whom were boys.

The Centurion made Cape Espiritu Santo late in May, and from that moment forward her people waited in the utmost impatience for the happy crisis which was to balance the account of their past calamities. They were drilled every day in the working of the guns and in the use of their small-arms. The vessel kept at a distance from the cape, in order not to be discovered. But, in spite of all precautions, she was seen from the land, and information of her presence was sent to Manilla, where a force consisting of two ships of thirty-two guns, one of twenty guns, and two sloops of ten guns, was at once equipped : it never sailed, however, on account of the monsoon.

On the 20th of June at sunrise, the man at the masthead of the Centurion discovered a sail in the south-east quarter. A general joy spread through the ship, and the commodore instantly stood towards her. At eight o'clock she was visible from the deck, and proved to be the famous Manilla galleon. She did not change her course, much to Anson's surprise, but continued to bear down upon him. It afterwards appeared that she recognised the hostile sail to be the Centurion, and resolved to fight her. Anson picked out thirty of his choicest hands and distributed them into the tops as marksmen. Instead of firing broadsides with intervals between them, he resolved to keep up a constant but irregular fire, thus baffling the Spaniards if they should attempt their usual tactics of falling down upon the decks during a broadside and working their guns with great briskness during the intermission. At one o'clock the Centurion being within gun-shot of the enemy, hoisted her pennant. The Spaniard now, for the first time, began to clear her decks, and tumbled cattle, sheep, pigs, goats, and poultry promiscuously into the sea. Anson gave orders to fire with the chase-guns : the galleon retorted with her stern-chasers. During the first half-hour he lay across her bow, traversing her with nearly all his guns, while she could bring hardly half a dozen of hers to bear. The mats with which the galleon had stuffed her netting now took fire, and burned violently, terrifying the Spaniards and alarming the English, who feared lest the treasure would escape them. However, the Spaniards at last cut away the netting and tossed the blazing mass into the sea among the struggling and roaring The Centurion swept the galleon's decks, the topcattle. men wounding or killing every officer but one who appeared upon the quarter, and totally disabling the commander himself. The confusion of the Spaniards was now plainly visible from the Centurion. The officers could no longer

bring the men up to the work; and at about three in the afternoon she struck her colours and surrendered.

The galleon, named the Nostra Signora de Cabadonga, proved to be worth in hard money about $\pounds 260,000$. She lost sixty-seven men in the action, besides eighty-four wounded; while the Centurion lost but two men, and had but seventeen wounded, all of whom recovered but one. "Of so little consequence," remarks Anson, "are the most destructive arms in untutored and unpractised hands."

The specie was at once removed to the Centurion, the Cabadonga being appointed by Anson to be a post-ship in his Majesty's service, and the command being given to Mr. Saumarez, the first lieutenant of the Centurion. The two vessels then stood for the Canton River, and arrived off Macao on the 11th of July. On the way, Anson reckoned up not only the value of the prize just captured, but the total amount of the losses his expedition had caused the crown of Spain since it left the English shores. The galleon was found to have on board about £273,000 in gold. and thirty-five thousand six hundred and eighty-two ounces of virgin silver, besides cochineal and other commodities. This, added to the other treasure taken in previous prizes, made the sum-total of Anson's captures in money not far from two millions,-independent of the ships and merchandise which he had either burned or destroyed, and which he set down as three millions more ; to which he added the expense of an expedition fitted out by the court of Spain, under one Joseph Pizarro, for his annoyance, and which, he learned from the galleon's papers, had been entirely broken up and destroyed.

At Macao, Anson sold the galleon for ± 1200 , which was much less than her value. He was very anxious to get to sea at once, that he might be himself the first messenger of his good fortune, and thereby prevent the enemy from forming any projects to intercept him. The Centurion weighed anchor from Macao on the 15th of December 1743 : she touched at the Cape of Good Hope on the 11th

of March 1744, where the commodore sojourned a fortnight. in a spot which he considered as not disgraced by a comparison with the valleys of Juan Fernandez or the lawns of Tinian. The fortuitous escapes and remarkable adventures which had characterized the career of his famous ship continued till she saluted the British forts. The French had espoused the cause of Spain ; and a large French fleet was cruising in the Chops of the Channel at the moment when the Centurion crossed it. The log afterwards proved that she had run directly through the hostile squadron, concealed from view by a dense and friendly fog. She arrived safe at Spithead on the 15th of June, after an absence of three years and nine months. Anson caused the captured wealth to be transported to London, upon thirty-two waggons, to the sound of drum and fife. The two millions were divided, according to the laws which regulate the distribution of prize-money, between Anson, his officers and men,-the crown abandoning every penny to those who had suffered and fought for it. Anson was now the richest man in the naval service. The sympathy and applause bestowed upon him by the public may be imagined from the fact that the narrative of his voyage went through four immense editions in a single year, was translated into seven European languages, and met with a far greater success than had ever fallen to the lot of any maritime journal.

Several years after the period of which we have been speaking, the French Government had colonized the Falkland Islands, lying off the eastern coast of Patagonia. The establishment lasted barely three years, and, in an agricultural point of view, was a complete and disastrous failure. The Spanish crown subsequently claimed these islands as belonging to the continent of South America, and the King of France was easily induced to abandon them. Captain Louis-Antoine de Bougainville was instructed, in 1766, to proceed to the islands, and there, in the name of his French majesty, cede them to the Spanish authorities who would be sent out for the purpose. He was then to continue on, by the Strait of Magellan and the Pacific, to the East Indies, and thence to return home. Should he accomplish this task, he would be the first French circumnavigator of the globe.

Bougainville's mission was attended with the most complete success, but contains little on which we require to dwell. After they had been more than a year at sea, it was discovered that one of the hands in the expedition. engaged as servant to the botanist, was a woman. The commander on hearing this went on board the store-ship to make investigations. He thought the report incredible, as Baré was already an expert botanist, and had acquired the name, during his excursions with his master among the snows of Magellan's Strait-where he carried provisions, fire-arms, and bundles of plants-of being his beast of burden. The first suspicion of him occurred at Tahiti. where the natives, with the keen intuition of savages, cried out in their dialect, "It is a woman !" and insisted on paying her the attentions due to her sex. When Bougainville went on board the Étoile, Baré, bathed in tears, admitted that she was a woman. She said she was an orphan, had served before in men's clothes, and that the idea of a voyage around the world had inflamed her curiosity. Bougainville does her the justice to state that she always behaved on board with the most scrupulous modesty. She was not handsome, and was twenty-seven years of age. She was the first woman that ever circumnavigated the globe.

Bougainville returned to France on the 16th of March 1769, having been absent two years and four months, and having lost only seven men during the voyage. He was the first Frenchman who ever went round the world in one ship—one Gentil de la Barbinais, a pirate, having accomplished a voyage of circumnavigation in several ships, some fifty years before. He sustained his claim to this honour by publishing a narrative of his expedition, written in an animated and graceful style, and which established his reputation as a sailor and explorer.

CHAPTER XII.

VOYAGES FOR THE ADVANCEMENT OF SCIENCE : BYRON-WALLIS AND CARTERET-COOK'S THREE VOYAGES.

ENGLAND was now at peace with all the world, and His Majesty George III. conceived an idea which till then had penetrated no royal brain—that of sending out vessels upon voyages of discovery in the single view of extending the domain of science and contributing to the advancement of geographical knowledge. Voyages had previously been undertaken for purposes either of conquest, colonization, pillage, or privateering; and discovery had usually been the result of accident, and was generally subordinate to the grand business of plunder and rapine. The most prominent of these voyages being those under the command of the celebrated Captain Cook, it will be unnecessary to do more than refer to the others.

The first consisted of two vessels, the Dolphin and Tamar, the former a man-of-war of twenty-four guns, and the latter a sloop of sixteen, commanded by Commodore John Byron, who had been one of the wrecked captains of Anson's fleet in 1740. After entering the South Sea, Byron turned to the north as far as Juan Fernandez, and then making a long stretch to the west in 14° 5' south latitude and in 145° west longitude, discovered a group of islands, two of which he named St. George's Islands. Here the savages, in attempting to repel an invasion of their domain, provoked reprisals, and two or three of them were killed ; one being pierced by three balls which went quite through his body, took up a large stone and died in the act of 206



BYRON'S CREW ATTACKED BY SAVAGES.

At St. George's Island the savages, in attempting to repel an invasion of their domain, provoked reprisals, and two or three of them were killed; one being pierced by three balls which went quite through his boir, took up a large stone and ided in the act of throwing it.--PAoz 206.



throwing it. After an absence of nearly two years, Byron returned to England with a loss of only six men in each ship, including those that were drowned. This number was so inconsiderable that it was deemed probable that more of them would have died had they remained on shore. Byron, having discharged all the duties devolving on him during this voyage with prudence and energy, could not be held responsible for the poverty of the scientific results obtained—a circumstance owing to the absence of scientific men, naturalists, mathematicians, astronomers, &c.

The Government resolved to make another effort, and to equip the expedition in a style more adequate to its necessities. The Dolphin was immediately refitted and furnished for a voyage to be made in the same seas under Captain Samuel Wallis. The Swallow, a sloop of fourteen guns, was appointed to be her consort, instead of the lumbering Tamar, and Captain Carteret, who had accompanied Byron, was ordered to command her. The Prince Frederick was appointed to accompany them as store-ship. They left Plymouth in company on the 22d of August 1766. The vessels were separated during a storm in the Strait of Magellan in 1767, and the Dolphin arrived in the Downs on the 20th of May 1768. Wallis was enabled to communicate a paper to the Royal Society, in time for that body to give to Lieutenant Cook, then preparing for his first voyage, more complete instructions by which to govern his movements.

After an absence of three years, the Swallow anchored at Spithead. No navigator had yet done so much with resources so insufficient. Carteret's discoveries were of the highest interest in a geographical point of view. He was a worthy predecessor of Cook ; and his achievements with a crazy ship and a disabled crew prepared the public mind for the researches which his already distinguished successor would be enabled to make with the carefully-equipped expedition placed under his command.

FIRST VOYAGE OF COOK.

In the year 1768 the Royal Society of England induced the Government to equip and despatch a vessel to the South Seas. The vessel whose career we are now to chronicle sought neither capture, nor spoil, nor prize-money. It was a peaceful ship, with a peaceful name-the Endeavour : her commander bore a name to be rendered illustrious by peaceful deeds, and he was bound upon a peaceful errand. James Cook, an officer of forty years of age, who had rendered efficient service in America at the capture of Quebec, and who had shown himself a capable astronomer, was instructed to proceed to the island named Sagittaria by Quiros, and King George the Third's Island by Wallis, there to observe and record the transit of the planet Venus over the disk of the sun. The position of the island as reported by Wallis was deemed to be exceedingly favourable for such an observation. Cook was promoted to the rank of lieutenant ; Charles Green was attached to the ship in the capacity of astronomer ; Joseph Banks and Solanderthe latter a Swede and a pupil of Linnæus-in that of naturalists; Buchan as draughtsman; and Parkinson as painter. The vessel sailed from Plymouth Sound, with a fair wind, on the 25th of August.

The voyage to Rio Janeiro was enlivened by many incidents now of quite ordinary occurrence, but novel and interesting to navigators one hundred years ago. They saw flying fish whose scales had the colour and brightness of burnished silver. They caught a specimen of that species of mollusc which sailors call a Portuguese Man-of-War—a creature ornamented with exquisite pink veins, and which spreads before the wind a membrane which it uses as a sail. They observed that luminous appearance of the sea now familiar to all, but then a startling novelty. They were of opinion that it proceeded from some light-emitting animal : they threw over their casting-net, and drew up vast numbers of medusæ, which had the appearance of metal heated to a glow, and gave forth a white and silvery effulgence. At Rio Janeiro the viceroy regarded them with strong suspicion, and refused to allow Mr. Banks to collect plants upon the shore.

Towards the 1st of January 1769 the sailors began to complain of cold, and each of them received a Magellanic jacket. On the 11th, in the midst of penguins, albatrosses, sheer-waters, seals, whales, and porpoises, they descried the Falkland Islands, and, soon after, the coast of Terra del Fuego. On the 15th ten or twelve of the company went on shore, and were met by thirty or forty of the natives. Each of the latter had a small stick in his hand, which he threw away, seeming to indicate by this pantomime a renunciation of weapons in token of peace. Acquaintance was then speedily made : beads and ribbons were distributed, and a mutual confidence and good-will produced. Conversation ensued-if speaking without conveying a meaning, and listening without comprehending, can be called so. Three Indians accompanied the strangers back to the ship. One of them, apparently a priest, performed a ceremony of exorcism, vociferating with all his force at each new portion of the vessel which met his gaze, seemingly for the purpose of dispelling the influence of magic which he supposed to prevail there.

On the 22d of January, Cook weighed anchor and commenced the passage through the Straits of Lemaire; on the 26th he doubled Cape Horn and entered the Pacific Ocean. He sailed for many weeks to the westward, making many of the islands which had been discovered the year before by the French navigator Bougainville, and himself discovering others. On the 11th of April he arrived at King George's Island, his destination, and the next morning came to anchor in Port Royal Bay, in thirteen fathoms' water. The natives brought branches of a tree, which seemed to be their emblem of peace, and indicated by their gestures that they should be placed in some conspicuous part of the ship's rigging. They then brought fish, cocoa-nuts, and bread-fruit, which they exchanged for beads and glass. The ship's company went on shore, and mingled in various ceremonies instituted for the purpose of promoting fellowship and good-will. During one of these, Dr. Solander and Mr. Markhouse the latter a midshipman—suddenly complained that their pockets had been picked. Dr. Solander had lost an operaglass in a shagreen case, and Mr. Markhouse had been relieved of a valuable snuff-box. A hue and cry was raised, and the chief of the tribe informed of the theft. After great effort and a long delay, the shagreen case was recovered ; but the opera-glass was not in it. After another search, however, it was found and restored. The savages, upon being asked the name of their island, replied, O-Tahiti,— "It is Tahiti." The present mode of writing it, therefore, --Otaheite,—is erroneous : Tahiti is the proper spelling.

Cook now made preparations for observing the transit of Venus. He laid out a tract of land on shore, and received from the chief of the natives a present of the roof of a house, as his contribution to science. He erected his observatory under the protection of the guns of his vessel, being somewhat suspicious of the object of such constant offerings of branches as the inhabitants insisted upon making. Mr. Parkinson, the painter, found it difficult to prosecute his labours; for the flies covered his paper to such a depth that he could not see it, and ate off the colour as fast as he applied it.

One day Mr. Banks was informed that an Indian friend of his, Tubourai by name, was dying, in consequence of something which the sailors had given him to eat. He hastened to his hut, and found the invalid leaning his head against a post in an attitude of the utmost despondency. The islanders about him intimated that he had been vomiting, and produced a leaf folded up with great care, which they said contained some of the poison from the fatal effects of which he was now expiring. He had chewed the portion he had taken to powder, and had swallowed the spittle. During Mr. Banks's examination of the leaf and its contents, he looked up with the most piteous aspect, intimating that he had but a short time to live. The deadly substance proved to be a quid of tobacco. Mr. Banks prescribed a plentiful dose of cocoanut-milk, which speedily dispelled Tubourai's sickness and apprehensions.

On the 1st of May the astronomical quadrant was taken on shore for the first time and deposited in Cook's tent. The next morning it was missing, and a vigorous search was instituted. It had been stolen by the natives, and carried seven miles into the interior. Through the intervention of Tubourai it was recovered and replaced in the observatory.

Thus far the integrity of Tubourai had been proof against every temptation. He had withstood the allurements of beads, hatchets, coloured cloth, and quadrants, but was finally led astray by the fascinations of a basket of nails. The basket was known to have contained seven nails of unusual length, and out of these seven five were missing. One was found upon his person; and he was told that if he would bring back the other four to the fort the affair should be forgotten. He promised to do so, but, instead of fulfilling his promise, removed with his family to the interior, taking the nails and all his furniture with him.

The transit of Venus was observed, with perfect success, on the 3d of June, by means of three telescopes of different magnifying powers, by Cook, Dr. Solander, and Mr. Green. Not a cloud passed over the sky from the rising to the setting of the sun. A party of natives contemplated the process in solemn silence, and were made to understand that the strangers had visited their island for the express purpose of witnessing the immersion of the planet. The ship left Tahiti on 13th June.

Lieutenant Cook now discovered, successively, the various islands which he regarded as forming an archipelago, and to which he gave the name of Society Islands. He left the last of them on the 15th of August, and on the 25th celebrated the anniversary of their leaving England by taking a Cheshire cheese from a locker and tapping a cask of porter. On the 30th they saw the comet of that year, Tupia remarking with some agitation that it would foment dissensions between the inhabitants of the two islands of Bolabola and Ulieta, who would seem, from this, to have been peculiarly susceptible to meteorological influences. On the 7th of October they discovered land, and anchored in an inlet to which they gave the name of Poverty Bay. This was the north-east coast of New Zealand,-an island discovered in 1642 by Tasman, and which had not been seen since, a space of one hundred and twenty-seven years. The natives received them with distrust, and several of them were killed by musket-shots. All efforts to enter into amicable relations with them failed. Somewhat farther to the south they found the natives more disposed to be friendly, and Mr. Banks and Dr. Solander went ashore and shot several birds of exquisite beauty.

The expedition had thus far been sailing to the southward. Dissatisfied with the results, and finding it difficult to procure water in sufficient quantities, Cook put about, determining to follow the coast to the northward. He named a promontory in the neighbourhood Cape Turnagain. Another * promontory, more to the north, where a huge canoe made a hasty retreat, he called Cape Runaway. On the 9th of November, the transit of Mercury was successfully observed, and the name of Mercury Bay given to the inlet where the observation was made. Two localities, for reasons which will be obvious, were called Oyster Bay and Mangrove River. Before leaving Mercury Bay, Cook caused to be cut, upon one of the trees near the watering-place, the ship's name and his own, with the date of their arrival there, and, after displaying the English colours, took formal possession of it in the name of his Britannic Majesty King George the Third.

On the 17th of December, they doubled North Cape, which is the northern extremity of the island, and commenced descending its western side. The weather now became stormy and the coast dangerous, so that the vessel was obliged to stand off to great distances, and intercourse with the natives was very much interrupted. At one point, however, the English satisfied themselves that the inhabitants ate human flesh, the flesh at least of enemies who had been killed in battle.

By the end of March 1770 the ship had circumnavigated the two islands forming what is now known as New Zealand, and had therefore proved, what was before uncertain, that it was insular, and not a portion of any grand Southern mainland. The whole voyage, in fact, had been unfavourable to the notion of a Southern continent, for it had swept away at least three-quarters of the positions upon which it had been founded. It had also totally subverted the theory according to which the existence of a Southern continent was necessary to preserve an equilibrium between the Northern and Southern hemispheres; for it had already proved the presence of sufficient water to render the Southern hemisphere too light, even if all the rest should be land.

The vessel left New Zealand on the 31st of March, sailing due west, and on the 18th of April Mr. Hicks, the first lieutenant, discovered land directly in the ship's path. This was the most southerly point of New Holland, and was called, from its discoverer, Point Hicks. Cook followed the coast for many days to the northward ; and it was only on the third that he learned, from ascending smoke, that the country was inhabited. On the 13th he saw a party of natives walking briskly upon the shore. These subsequently retired, leaving the defence of the coast to two persons of very singular appearance. The landing party detached by Cook numbered forty men; and one of the musketeers was ordered to show the two champions the folly of resistance, by lodging a charge of small shot in their legs. The wooders and waterers then went ashore, and with some difficulty obtained the necessary supplies.

Early in May, Cook landed at a spot to which, from a casual circumstance, he gave the name of BOTANY BAY, a name now famous the world over. Mr. Banks and Dr.

Solander collected here large quantities of plants, flowers, and branches of unknown trees; and it was this incident that furnished the pastoral appellation to the Retreat for Transported Criminals. They found the woods filled with birds of the most exquisite beauty; the shallow coasts were haunted with flocks of water-fowl resembling swans and pelicans; the mud-banks harboured vast quantities of oysters, mussels, cockles, and other shell-fish. The inhabitants went totally naked, would never parley with the strangers, and did not seem to understand the Tahitian dialect of Tupia.

On the night of Sunday the 10th of June, the vessel struck at high tide upon a rock which lay concealed in seventeen fathoms' water, and beat so violently against it that there seemed little hope of saving her. Land was twenty-five miles off, with no intervening island in sight. The sheathing-boards were soon seen to be floating away all around, and the false keel was finally torn off. The six deck-guns, all the iron and stone ballast, casks, staves, oiljars, decayed stores, to the weight of fifty tons, were thrown overboard with the utmost expedition. To Cook's dismay, the vessel thus lightened did not float by a foot and a half at high tide, so much did the day-tide fall short of that of the night. They again threw overboard everything which it was possible to spare ; but the vessel now began to leak, and it was feared she must go to the bottom as soon as she ceased to be supported by the rock, so that the floating of the ship was anticipated not as a means of deliverance, but as an event that would precipitate her destruction. The ship floated at ten o'clock, and was heaved into deep water. There were nearly four feet of water in the hold. The leak was held at bay for a time ; but the men were finally exhausted, and threw themselves down upon the deck, flooded as it was to the depth of three inches by water from the pumps. The vessel was finally saved by the following expedient, proposed and executed by Mr. Markhouse :---He took a lower studding-sail, and having mixed together a large quantity of oakum and wool, chopped pretty small, stitched it down in handfuls upon the sail as tightly as possible. The sail was then hauled under the ship's bottom by ropes ; and, when it came under the leak, the suction which carried in the water carried in with it the oakum and the wool. The leak was so far reduced that it was easily kept under by one pump. The vessel was finally got ashore and beached in Endeavour River : the surrounding localities were fitly named Tribulation Bay, Weary Point, and the Islands of Hope.

On the 3d of August, the ship sailed from Endeavour River, the carpenter having at last completed the necessary repairs. They now coasted along the edge of a reef which stretched out some twenty miles from the shore. This became suddenly of so formidable an aspect, and the winds and waves rolled them towards it with sure and fatal speed. that the boats were got out and sent ahead to tow, and finally succeeded in getting the ship's head round. The surf was now breaking to a tremendous height within two hundred vards : the water beneath them was unfathomable. An opening in the reef was now discovered, and the dangerous expedient of forcing the ship through it was successfully tried. They anchored in nineteen fathoms' water. over a bottom of coral and shells. The opening through the reef received the name of Providential Channel.

They sailed to the northward many days within the reef, till they at last found a safe passage out. Cook then for the last time hoisted English colours upon the eastern coast, which he was confident no European had seen before, and took possession of its whole extent, from south latitude thirty-eight to latitude ten. He claimed it in behalf of his Majesty King George the Third, by the name of New South Wales, with all its bays, rivers, harbours, and islands. Three volleys of small-arms were then fired, and the spot upon which the ceremony was performed was named Possession Island. The ship passed out to the westward, finding open sea to the north cf New Holland ; a circumstance which gave great satisfaction to all on board, as it showed that New Holland and New Guinea were separate islands, and not, as had been imagined, different parts of the supposed Southern continent. On Thursday the 24th of August the ship left New Holland, steering towards the north-west, with the intention of making the coast of New Guinea.

Early in September they arrived among a group of islands which they supposed to lie along the coast of New Guinea. As they attempted to land, Indians rushed out of the thickets upon them with hideous shouts, one of them throwing something from his hand which burned like gunpowder but made no report. Their numbers soon increased, and they discharged these noiseless flashes by four and five at a time. The smoke resembled that of a musket, and as they held long hollow canes in their hands, the illusion would have been perfect had the combustion been accompanied by concussion. Those on board the ship were convinced the natives possessed fire-arms, supposing that the direction of the wind prevented the sound of the discharge from reaching them. Cook determined to lose no time in this latitude, having accomplished what he considered as of paramount importance ; that is, he had sailed between the two lands of New Holland and New Guinea, and had thus established their insular character beyond any possibility of controversy.

He now sailed to the west, and anchored, on the 8th of October, at Batavia, in Java. Here he laid up the ship for repairs. "What anxieties we had escaped," he writes, "in our ignorance that a large portion of the keel had been diminished to the thickness of the under leather of a shoe !" But the ship's company, which had been so wonderfully preserved from the perils of the sea, were destined to undergo the rude attacks of disease upon land. Markhouse, the surgeon, Tupia and Tayeto, the Tahitians, and four sailors, were rapidly carried off by fever. On the 27th of December the ship weighed anchor, the sick-list including forty names. Before doubling the Cape of Good Hope she lost Sporing, one of the assistant naturalists, Parkinson the artist, Green the astronomer, Molineux the master, besides the second lieutenant, four carpenters, and ten sailors. Cook was forced to wait a month at the Cape, and, on the 12th of July 1771, he cast anchor in the Downs, after a cruise of three eventful years. His crew was decimated, and his ship no longer seaworthy. The skill and enterprise displayed by Cook, and the important results attained by the voyage, induced the Government to raise him to the rank of Commander.

SECOND VOYAGE OF COOK.

The English Government now determined to despatch an expedition in search of the supposed Southern or Austral continent. A Frenchman, by the name of Benoit, had seen, in 1709, to the south of the Cape of Good Hope, in latitude 54° and in longitude 11° east, what he believed to be land, naming it Cape Circumcision. Cook was placed in command of the Resolution and Adventure, and instructed to endeavour to find this cape and satisfy himself whether it formed part of the great continent in question. He left Plymouth on the 13th of July 1772, and the Cape of Good Hope on the 22d of November.

A terrific gale soon drove both vessels from their course, washed overboard their live stock, and wellnigh disabled the Resolution. The cold increased suddenly, and drawers and fear-noughts were served in abundance to the crew. Immense ice-islands now occupied the horizon, and the sea, dashing over them to the height of sixty feet, filled the air with its ceaseless roar. On Sunday, the 13th of December, they were in the latitude of Cape Circumcision, but ten degrees east of it. For weeks they kept in high southern latitudes, now menaced by towering peaks of ice, now enclosed by immense fields and floating masses, till, towards the 1st of February 1773, Cook came to the unwelcome conclusion that the cape discovered by Benoit was nothing more than a huge tract of ice, which, being chained to no anchorage, and subject to no latitude, he had no reason to expect to find in the spot where the credulous Frenchman had discovered it sixty years before.

On the 8th of February, the Resolution lost sight of the Adventure, and cruised three days in search of her, firing guns and burning false fires, but without success. On the 17th, between midnight and three in the morning, Cook saw lights in the sky similar to those seen in high northern latitudes, and known by the name of Aurora Borealis. The Aurora Australis had never been seen before. It sometimes broke out in spiral rays, and in a circular form ; its colours were brilliant, and it diffused its light throughout the heavens. On the 24th, a tremendous gale, accompanied with snow and sleet, made great havoc among the ice-islands, breaking them up, and largely increasing the number of floating and insidious enemies the ship had to contend with. These dangers were now, however, so familiar to the crew, that the apprehensions they caused were never of long duration. and were in some measure compensated by the seasonable supplies of water the ice-islands afforded them, and without which they would have been greatly distressed.

On the 16th of March, Cook found himself in latitude 59°, longitude 146° east. He now determined to quit this quarter, where he was convinced he should find no land, and proceed to New Zealand to look for the Adventure, and to refresh his crew. On the 26th he anchored in Dusky Bay, New Zealand, after having been 117 days at sea, and having sailed eleven thousand miles without once seeing land. This point, the most southerly of New Zealand, had never been visited by a European before.

While coasting to the northward, towards Queen Charlotte's Sound, where he expected to find the Adventure, Cook suddenly observed six water-spouts between his vessel and the land. Five of them soon spent themselves; the sixth started from a point three miles distant, and passed within fifty yards of the stern of the Resolution, though she felt no shock. The diameter of its base was about sixty feet; within this space the sea was much agitated, and foamed up to a great height. From this a tube was formed, by which the water and air were carried up in a spiral stream to the clouds, from whence the water did not descend again, being dispersed in the upper regions of the atmosphere. "I have been told," says Cook, "that the firing of a gun will dissipate water-spouts; and I am sorry that we did not try the experiment, as we were near enough, and had a gun ready for the purpose; but as soon as the danger was past I thought no more about it."

On the 18th of May, the Resolution discovered the Adventure in Queen Charlotte's Sound. The crews of the two ships were overjoyed at meeting each other after a separation of fourteen weeks. The captain of the latter had seen upon the coast some natives of the tribe which had furnished Tupia to Cook's vessel upon his first voyage. They seemed quite concerned when informed that he had died at Batavia, and were anxious to know whether he had been killed, and whether he had been buried or eaten.

The two ships sailed in company from New Zealand on the 7th of June, their purpose being to proceed to the eastward in search of land as far as longitude 140° west, between the latitudes of 41° and 46° south. During a long cruise, Cook saw nothing which induced in him the belief that they were in the neighbourhood of any continent between the meridian of New Zealand and America. Α fact which militated against it was, that they had, as is usual in all great oceans, large billows from every direction in which the wind blew a fresh gale. These billows never ceased with the cause which first put them in motion-a sure indication that no land was near. They constantly passed low and half-submerged islands, now consisting of coral shoals fretting the waves into foam, and now of islets clothed with verdure. On the 17th of August they arrived at Tahiti, after an entirely fruitless voyage.

The thieving and cheating propensities of the natives appeared in **bold** relief during the sojourn of the English upon their coast. The latter sometimes paid in advance for promised supplies of hogs and fowls, in which case they were sure never to get them, the wary trader making off with his axe, shirt, or nails, and dispensing with the necessity of fulfilling his engagement. The practice of overreaching was not confined to the underlings of society, but extended even to the chiefs. A potentate of high warlike renown came one day to the side of the Resolution, and offered for sale a superb bundle of cocoa-nuts, which was readily bought by one of the officers. On untying it, it was found to consist of fruit which they had already once bought, and which had been tapped, emptied of the milk, and thrown overboard. The dishonest dignitary sat in his cance at a distance, indicating by the glee and vigour of his pantomime that he enjoyed in a supreme degree the brilliant success of this mercantile fraud.

Cook left Tahiti early in September, taking with him a young savage named Poreo, who was smitten with a desire to visit foreign parts. At the neighbouring island of Huaheine, a native named Omai, belonging to the middle class, was also taken on board. Cook thus speaks of him two years later :—" Omai has most certainly a good understanding, quick parts, and honest principles : he has a natural good behaviour, which renders him acceptable to the best company, and a proper degree of pride, which teaches him to avoid the society of persons of inferior rank. He has passions of the same kind as other young men, but has judgment enough not to indulge them to an improper excess." Omai was taken back to Huaheine by Cook when he started upon his third voyage of discovery, in 1776.

Cook arrived at Middlebourg, one of the Friendly Islands, early in October. Two cances, rowed by three men each, came boldly alongside ; and some of them entered the ship without hesitation. One of them seemed to be a chief, by the authority he exerted, and accordingly received a present of a hatchet and five nails. Tioony—such was this potentate's name—was thus cheaply conciliated. Cook and a party soon embarked in a boat, accompanied by Tioony, who

conducted them to a little creek, where a landing was easily effected. Tioony brandished a branch of the tree of peace in his right hand, extending his left towards an immense crowd of natives, welcomed the English on shore with loud acclamations. Not one of them carried a weapon of any sort : they thronged so thickly around the boat that it was difficult to get room to land. They seemed more desirous to give than receive ; and many threw whole bales of cloth and armfuls of fruit into the boat, and then retired without either asking or waiting for an equivalent. Tioony then conducted the strangers to his house, which was situated upon a fine plantation beneath the shade of shaddock-trees. The floor was laid with mats. Bananas and cocoa-nuts were set before them to eat, and a beverage was prepared for them to drink. This was done in the following manner : -Pieces of a highly-scented root were vigorously masticated by the natives; the chewed product was then deposited in a large wooden bowl and mixed with water. As soon as it was properly strained, cups were made of green leaves which held nearly half a pint, and presented to the English. No one tasted the contents but Cook-the manner of brewing it having quenched the thirst of every one else. In this island, as well as in the neighbouring one of Amsterdam, the · people-both men and women-were observed to have lost one or both of their little fingers. Cook endeavoured in vain to discover the reason of this mutilation.

On his return to New Zealand in November, Cook found that his efforts to introduce new plants and animals had been frustrated by the natives. One of the sows had been incapacitated by a severe cut in one of her hind legs; the other sow and the boar had been sedulously kept separate. The two goats had been killed by a fellow named Gobiah, and the potatoes had been dug up. Cook here beheld a feast of human flesh. A portion of the body of a young man of twenty years was broiled and eaten by one of the natives with evident relish. Several of the ship's crew were rendered sick by the disgusting sight. The Adventure separated from her consort at this point; nor was she again seen during the remainder of the voyage. Cook left New Zealand early in December for a last attempt in the Southern Ocean. On the 12th he saw the first ice, and on the 23d, in latitude 67° , found his passage obstructed by such quantities that he abandoned all hopes of proceeding any farther in that direction, and resolved to return to the north. As he was in the longitude of 137°, it was clear that there must be a vast space of sea to the north unexplored—a space of twenty-four degrees, in which a large tract of land might possibly lie.

Late in February 1774, Cook was taken ill of bilious colic, and for some days his life was despaired of. The crew suffered severely from scurvy. On the 11th of March, they fell in with Roggewein's Easter Island, which they recognised by the gigantic statues which lined the coast. They noticed a singular disproportion in the number of the males and females, having counted in the island some seven hundred men and only thirty women.

Early in April, Cook arrived among the Marquesas Islands, discovered in 1595 by Mendana. On the 22d he arrived at Point Venus, in Tahiti, where he had observed the transit in 1769, and of which the longitude was known : he was able, therefore, to determine the error of his watch, and to fix anew its rate of going. The natives, and especially Otoo, the king, expressed no little joy at seeing him again. On leaving Tahiti, Cook visited in detail the islands named Espiritu Santo by Quiros, and Grandes Cyclades by Bougainville. As he determined their extent and position, he took the liberty of changing their name to that of the New Hebrides.

Cook now discovered the large island of New Caledonia, whose inhabitants he mentions as possessing an excellent character. Subsequent navigators, however, ascertained them to be cannibals. They were much lower in the scale of intelligence than the Tahitians. Cook was unable to obtain provisions; and as his crew were now suffering from

famine, he returned to New Zealand, where he arrived on the 18th of October. He left again on the 10th of November. and anchored on the 21st of December in Christmas Sound, in Terra del Fuego. He doubled Cape Horn, discovered numerous islands of little importance, and finally headed the vessel for the Cape of Good Hope. He anchored in Table Bay on the 19th of March 1775. He here found news of the Adventure, which had already passed the Cape on her way home. On the 30th of July, Cook landed at Plymouth, after an absence of three years and eighteen days. During this space of time he had lost but four men, and only one of these four by sickness. He was promoted to the rank of captain, was elected a member of the Royal Society of London, and received the Godfrey Copley gold medal in testimony of the appreciation in which his efforts to preserve the health of his crew were held by the Government. He was now forty-seven years of age.

THIRD VOYAGE OF COOK.

Cook might justly have retired at this period to private life, to enjoy his well-earned reputation. But the grand question of the North-west Passage, now agitated by the press and the public, induced him once more to tempt the perils of foreign adventure. As every effort to force a passage through Baffin's or Hudson's Bay had signally failed, it was determined to make the experiment through Behring's Straits. On the 9th of February 1776, Cook received the command of the sloop-of-war Resolution-the vessel in which he had made his last voyage-the Discovery, of three hundred tons, being appointed to accompany the expedition. Both ships were equipped in a manner befitting the nature of their mission : they were well supplied with European animals and plants, which they were to introduce into the islands of the Pacific. Omai, the young Tahitian whom Cook had brought to England, was placed on board the Resolution, as it was not likely another opportunity would occur of sending him home. He left London with regret ;

but the consciousness that the treasures he carried with him would raise him to an enviable rank among his countrymen, operated by degrees to alleviate his sorrow. The Resolution sailed from Plymouth on the 12th of July, and was followed, on the 10th of August, by the Discovery : both vessels joined company, early in November, at the Cape of Good Hope.

As we have already been frequently over the track now for the third time traversed by Cook, we shall merely give his route, without detailing his adventures, which did not materially differ from those of his former voyages. He arrived at Van Diemen's Land in December, and passed a fortnight of the month of February 1777, in Queen Charlotte's Sound, New Zealand, Soon after he discovered an island which the natives called Mangya ; he noticed that the inhabitants, for want of a better pocket, slit the lobe of their ear and carried their knife in it. At another island of the same group. Omai extricated himself and a party of English from a position of great danger by giving an exaggerated account of the instruments of war used on board the ships. " These instruments," he said, " were so huge that several people could sit conveniently within them; and one of them was sufficient to crush the whole island at a shot." Had it not been for this formidable story, Omai thought the party would have been detained on shore all night. At one of the Society Islands Cook planted a pineapple and sowed some melon-seeds. He was encouraged to hope that endeavours of this kind would not be fruitless, for upon the same day the natives served up at his dinner a dish of turnips, the produce of the seeds he had left there during his last voyage.

The Resolution soon anchored off Tahiti, and Cook noticed particularly the conduct of Omai, now about to be restored to his home and his friends. A chief named Ootu, and Omai's brother-in-law, came on board. There was nothing either tender or striking in their meeting. On the contrary, there seemed to be a perfect indifference on both sides, till Omai, having taken his brother down into the cabin, opened the drawer where he kept his red feathers and gave him three of them. Ootu, who would hardly speak to Omai before, now begged that they might be friends. Omai assented, and ratified the bargain with a present of feathers; and Ootu, by way of return, sent ashore for a hog. But it was evident to the English that it was not the man, but his property, they were in love with. "Such," says Cook, "was Omai's first reception among his countrymen. Had he not shown to them his treasure of red feathers, I question much whether they would have bestowed even a cocoa-nut upon him. I own I never expected it would be otherwise."

The important news of the arrival of red feathers was conveyed on shore by Omai's friends, and the ships were surrounded early the next morning by a multitude of canoes crowded with people bringing hogs and fruit to market. At first a quantity of feathers not greater than might be plucked from a tomtit would purchase a hog weighing fifty pounds ; but such was the quantity of this precious article on board that its value fell five hundred per cent. before night. Omai was now visited by his sister; and, much to the credit of them both, their meeting was marked by expressions of the tenderest affection. Cook foresaw, however, that Omai would soon be despoiled of everything he had if left among his relatives : so it was determined to establish him at the neighbouring island of Huaheine. A large lot of land was obtained there from the chief, and the carpenters of the two ships set about building him a house fit to contain the European commodities that were his property. Cook told the natives that if Omai were disturbed or harassed he should upon his next visit make them feel the weight of his resentment. Omai took possession of his mansion late in October, and on Sunday, November 2, bade adieu to the officers of the ship. He sustained himself in this trying ordeal till he came to Cook, and then gave way to a passionate burst of tears. He wept abundantly while being conveyed on shore. "It was no small satisfaction to reflect," writes Cook, "that we had brought him back safe to the spot from which he was taken. And yet such is the strange nature of human affairs that it is probable we left him in a less desirable situation than he was in before his connexion with us. He had tasted the sweets of civilized life, and must now become more miserable from being obliged to abandon all thoughts of continuing them."

During the stay of the vessels at the Society Islands, Cook induced the crews to give up their grog and use the milk of cocca-nuts instead. He submitted to them whether it would not be injudicious, by drinking their spirits now, to run the risk of having none left in a cold climate, where cordials would be most needed, and whether they would not be content to dispense with their grog now, when they had so excellent a liquor to substitute in its place. The proposal was unanimously agreed to, and the grog was stopped except on Saturday nights.

Early in February 1778, Cook made a most important discovery—that of the archipelago now known as the Sandwich Islands, so named by Cook in honour of the Earl of Sandwich, First Lord of the Admiralty. He visited five of these islands, one of which was Oahu. He found a remarkable similarity of manners and coincidence of language with those of the Society Islands, and in his journal asks the following question :—"How shall we account for this nation having spread itself in so many detached islands, so widely separated from each other, in every quarter of the Pacific Ocean ? We find it from New Zealand in the south to the Sandwich Islands in the north ! And, in another direction, from Easter Island to the New Hebrides ! That is, over an extent of three thousand six hundred miles north and south, and five thousand miles east and west !"

From the Sandwich Islands Cook sailed to the north-east, and on the 7th of March struck the coast of America, upon the shores of the tract named New Albion by Sir Francis Drake. The skies being very threatening, he gave the name of Cape Foulweather to a promontory forming the northern extremity. Late in March the two vessels entered a broad inlet, to which Cook gave the name of King George's Sound ; but it is better known now by its original name of Nootka Sound. The natives were friendly and willing to sell and buy.

Cook left Nootka Sound on the 26th of April, and early in May entered a deep inlet, which he named Prince William's Sound. Proceeding on his course, as he supposed, towards Behring's Strait, he was surprised to find various indications that he was no longer in the sea, but ascending a wide and rapidly-flowing river. He was, however, encouraged to proceed by finding the water as salt as that of the ocean. Having traced the stream a distance of two hundred miles from its entrance, without seeing the least appearance of its source, and despairing of finding a passage through it to the Northern Seas, he determined to return. Mr. King, one of the officers, was sent on shore to display the flag and take possession of the country and river in his Majesty's name, and to bury in the ground a bottle containing some pieces of English coin of the year 1772. The vessels left the river-afterwards named, by order of Lord Sandwich, Cook's River-on the 5th of June.

On the 9th of August Cook arrived at a point of land in north latitude 66°, which he called Cape Prince of Wales, and which is the western extremity of North America. Had he sailed directly north from this spot he would have passed through Behring's Straits. But the attraction of two small islands drew him to the westward, and by nightfall he anchored in a bay on the coast of Asia, having in the course of twenty-four hours been in sight of the two continents. On the 12th, while sailing to the north, both continents were in sight at the same moment. On the 17th a brightness was perceived in the northern horizon, like that reflected from ice, commonly called the blink. But it was thought very improbable that they should meet with ice so soon. Still, the sharpness of the air and gloominess of the weather seemed to indicate some sudden change. The sight of a large field of ice soon left no doubt as to the cause of the brightness of the horizon. At half-past two, being in latitude 71° and in twenty-two fathoms water, Cook found himself close to the edge of the ice, which was as compact as a wall and twelve feet out of water. It extended to the north as far as the eye could reach. A point of land upon the American coast obtained the name of Icy Cape.

The season was now so far advanced that Cook abandoned all attempts to find a passage through to the Atlantic this year, and directed his attention to the subject of winter quarters. Discovering a deep inlet upon the American side, he named it Norton's Sound, in honour of Sir Fletcher Norton, Speaker of the House of Commons. At Oonalaska, an island some distance to the south, he fell in with three Russian carriers, who had some storehouses and a sloop of thirty tons' burden. They appeared to have a thorough knowledge of the attempts which had been made by their countrymen, Kamschatka, Behring, and others, to navigate the Frozen Ocean.

On the 26th of October Cook left Oonalaska for the Sandwich Islands, intending to spend the winter months there, and then to direct his course to Kamschatka, arriving there by the middle of May in the ensuing year. On the 26th of November the two ships anchored at the archipelago of the Sandwich Islands and discovered several new members of the group. At Owhyhee, Cook found the natives more free from reserve and suspicion than any other tribe he had met; nor did they even once attempt a fraud or a theft. Cook's confidence, already great, was still further augmented by a singular, if not grotesque incident.

The priests of the island resolved to deify the captain, under the name of Orono. One evening, as he landed upon the beach, he was received by four men, who immediately swathed him in red cloth, and then conducted him to a

sort of sacrificial altar, where, by means of an indescribable ceremony, consisting of rapid speeches, offerings of putrid hogs and sugar-canes, invocations, processions, chants, and prostrations, they conferred upon him a celestial character and the right to claim adoration. At the conclusion, a priest named Kaireekeea took part of the kernel of a cocoanut, which he chewed, and with which he then rubbed the captain's face, head, hands, arms, and shoulders. Ever after this, when Cook went ashore, a priest preceded him, shouting that Orono was walking the earth, and calling upon the people to humble themselves before him. Presents of pigs, cocoa-nuts, and bread-fruit were constantly made to him, and an incessant supply of vegetables sent to his two ships : no return was ever demanded or even hinted at. The offerings seemed to be made in discharge of a religious duty, and had much the nature of tribute. When Cook inquired at whose charge all this munificence was displayed, he was told that the expense was borne by a great man, named Kaoo, the chief of the priests, and grandfather of Kaireekeea : this Kaoo was now absent, attending Tereoboo, the king of the island.

The king, upon his return, set out from the village in a large canoe, followed by two others, and paddled toward the ships in great state. Tereoboo gave Cook a fan, in return for which Cook gave Tereoboo a clean shirt. Heaps of sugar-cane and bread-fruit were then given to the ship's crew, and the ceremonies were concluded by an exchange of names between the captain and the king,—the strongest pledge of friendship among the inhabitants of the Pacific islands.

It was not long before Tereoboo and his chiefs became very anxious that the English should bid them adieu. They imagined the strangers to have come from some country where provisions had failed, and that their visit to their island was merely for the purpose of filling their stomachs. "It was ridiculous enough to see them stroke the sides and pat the bellies of our sailors," says King, the continuator of Cook's journal, "and telling them that it was time for them to go, but that if they would come again the next breadfruit season they should be better able to supply their wants. We had now been sixteen days in the bay; and, considering our enormous consumption of hogs and vegetables, it need not be wondered that they should wish to see us take our leave." When Tereoboo learned that the ships were to sail on the next day but one, he ordered a proclamation to be made through the villages, requiring the people to bring in presents to Orono, who was soon to take his departure.

On the 4th of February 1779, the vessels unmoored and sailed out of the harbour, after having received on board a present of vegetables and live stock which far exceeded any that had been made them either at the Friendly or Society Islands. The weather being, however, extremely unfavourable, they were compelled to return for shelter, and on the 11th dropped anchor in nearly the same spot as before. The foremast was found to be much damaged, the keel being exceedingly rotten, having a large hole up the middle of it. The reception of the ships was very different from what it had been on their first arrival : there were no shouts, no bustle, no confusion. The bay seemed deserted, though from time to time a solitary canoe stole stealthily along the shore.

Toward the evening of the 13th, a theft committed by a party of the islanders on board the Discovery gave rise to a disturbance of a very serious nature. Pareca, a personage of some authority, was accused of the theft, and a scuffle ensued, in which Pareca was knocked down by a violent blow on the head with an oar. The natives immediately attacked the crew of the pinnace with a furious shower of stones and other missiles, and forced them to swim off with great precipitation to a rock at some distance from the shore. The pinnace was immediately ransacked by the islanders, and would have been demolished, but for the interposition of Pareca, who, upon the recognition of his innocence, joined noses with the officers and seemed to have forgotten the blow he had received.

When Captain Cook heard of what had happened, he expressed some anxiety, and said that it would not do to allow the islanders to imagine they had gained an advantage. It was too late to take any steps that evening, however. A double guard was posted at the observatory, and at midnight one of the sentinels, observing five savages creeping toward him, fired over their heads and put them to flight. The cutter of the Discovery was stolen from the buoy where it was moored. At daylight Cook loaded his double-barrelled gun and ordered the marines to prepare for action. It had been his practice, when anything of consequence was lost, to get the king or several of the principal men on board, and to keep them as hostages till it was restored. His purpose was to pursue the same plan now. He gave orders to seize and stop all canoes that should attempt to leave the bay. The boats of both ships, well manned and armed, were therefore stationed across the mouth of the harbour. Cook went ashore in the pinnace, obtained an interview with the king, satisfied himself that he was in nowise privy to the theft committed, and invited him to spend the day on board the Resolution. Tereoboo readily consented, and, having placed his two sons in the pinnace, was on the point of following them, when an elderly woman, the mother of the boys, and a younger woman, the king's favourite wife, besought him with tears not to go on board. Two chiefs laid hold on him, insisting that he should go no farther. The natives now collected in prodigious numbers, and began to throng around Cook and their king. Cook, finding that the alarm had spread too generally, and that it was in vain to think of kidnapping the king without bloodshed, at last gave up the point.

Thus far the person and life of Cook do not appear to have been in danger. An accident now happened which gave a fatal turn to the affair. The ships' boats, in firing at cances attempting to escape, had unfortunately killed a chief of the first rank. The news of his death arrived just at the moment when Cook, after leaving the king, was walking slowly toward the shore. It caused an immediate and violent ferment: the women and children were at once sent off: the warriors put on their breast-mats and armed themselves with spears and stones. One of the natives went up to Cook, flourishing a long iron spike by way of defiance, and threatening him with a large stone. Cook ordered him to desist, but, as the man persisted in his insolence, was at length provoked to fire a load of small shot. As the shot did not penetrate the matting, the natives were encouraged, by seeing the discharge to be harmless, to further aggression. Several stones were thrown at the marines : their lieutenant, Mr. Phillips, narrowly escaped being stabbed by knocking down the assailant with the butt end of his musket. Cook now fired his second barrel, loaded with ball, and killed one of the foremost of the natives. A general attack with stones and a discharge of musketry immediately followed. The islanders, contrary to the expectations of the English, stood the fire with great firmness, and, before the marines had time to reload, broke in upon them with demoniacal shouts. Four marines were instantly killed; three others were dangerously wounded; Phillips received a stab between the shoulders, but, having fortunately reserved his fire, shot the man who had wounded him just as he was going to repeat the blow.

The last time that Cook was seen distinctly, he was standing at the water's edge, calling out to the people in the boats to cease firing. It is supposed that he was desirous of stopping further bloodshed, and wished the example of desisting to proceed from his side. His humanity proved fatal to him; and he lost his life in attempting to save the lives of others. It was noticed that while he faced the natives none of them offered him any violence, deterred, perhaps, by the sacred character he bore as an Orono; but the moment he turned round to give his orders to the men in the boats, he was stabbed in the back and fell face foremost into the water. The islanders set up a deafening yell and dragged his body on shore, where the dagger with which he had been killed was eagerly snatched by the savages from each other's hands, each one manifesting a brutal eagerness to have a share in his destruction.

"Thus fell," writes King, "our great and excellent commander. After a life of so much distinguished and successful enterprise, his death, as regards himself, cannot be reckoned premature, since he lived to finish the work for which he seemed designed, and was rather removed from the enjoyment than cut off from the acquisition of glory. How sincerely his loss was felt and lamented by those who had so long found their general security in his skill and conduct, and every consolation in their hardships in his tenderness and humanity, it is neither necessary nor possible for me to describe : much less shall I attempt to paint the horror with which we were struck, and the universal dejection and dismay which followed so dreadful and unexpected a calamity."

When the consternation consequent upon the loss of their commander had in some measure subsided, Clarke, the captain of the Discovery, assumed the chief command of the expedition. The ships were in such a bad condition, and the discipline became so relaxed upon the withdrawal of the master-mind, that it was decided to employ pacific measures, rather than a display of vigorous resentment, to obtain the restitution of the remains of Cook and of the four soldiers. The moderation of the English produced no effect, however, the natives using the bodies of the marines in sacrificial burnt-offerings to their divinities. As they considered that of Cook as of a higher order, they cut it carefully in pieces, sending bits of it to different parts of the island. Upon the evening of the 15th, two priests brought clandestinely to the ship the portion they had received for religious purposes,-flesh without bone, and weighing about nine pounds. They said that this was all that remained of the body, the rest having been cut to pieces and burned :

the head, however, and all the bones, except what belonged to the trunk, were in the possession of Tereoboo.

The natives on shore passed the night in feasts and rejoicings, seeking evidently to animate and inflame their courage previous to the expected collision. The next day, about noon, finding the English persist in their inactivity. great bodies of them, blowing their conch-shells and strutting about upon the shore in a blustering and defiant manner, marched off over the hills, and never appeared Those who remained compensated for the paucity again. of their numbers by the insolence of their conduct. One man came within musket-shot of the Resolution and waved Cook's hat over his head, his countrymen upon the water's edge exulting in his taunts and jeers. The watering-party sent upon their daily duty were so annoyed, that they only obtained one cask of water in an afternoon. An attack upon the village was in consequence decided upon, and was executed by the marines in a vigorous and effective manner. A sanguinary revenge was taken for the death of their commander; many of the islanders were slain, and their huts burned to the ground. This severe lesson was necessary, for the natives were strongly of opinion that the English tolerated their provocations because they were unable to suppress them, and not from motives of humanity. At last a chief named Eappo, a man of the very first consequence, came with presents from Tereoboo to sue for peace. The presents were received, but answer was returned that, until the remains of Captain Cook were restored, no peace would be granted.

On Saturday the 20th, a long procession was seen to descend the hill toward the beach. Each man carried a sugar-cane or two upon his shoulders, with bread-fruit and plantains in his hand. They were preceded by two drummers, who planted a staff, with a white flag upon it, by the water's edge, and drummed vigorously, while the rest advanced one by one and deposited their presents upon the ground. Eappo, in a long feathered cloak, and with a bearing of deep solemnity, mounted upon a rock and made signs for a boat. Captain Clarke went ashore in the pinnace, ordering Lieutenant King to attend him in the cutter. Eappo went into the pinnace and delivered to the captain a quantity of bones wrapped up in a large quantity of fine new cloth, and covered with a spotted cloak of black and white feathers. The bundle contained the hands of the unfortunate commander entire ; the skull, deprived of the scalp and the bones that form the face ; the scalp, detached, with the hair cut short, and the ears adhering to it; the bones of both arms, the thigh and leg bones, but without the feet. The whole bore evident marks of having been in the fire, with the exception of the hands, the flesh of which was left upon them, with several large gashes crammed with salt, apparently for the purpose of preventing decomposition. The lower jaw and feet, which were wanting, had been seized by different chiefs, Eappo said, and Tereoboo was using every means to recover them.

The next morning Eappo came on board, bringing with him the missing bones, together with the barrels of Cook's gun, his shoes, and several other trifles that had belonged to him. Eappo was dismissed with orders to "taboo" the bay-that is, to place it under interdict during the performance of the funeral ceremonies. This was done. Not a canoe ventured out upon the water during the remainder of the day, and, in the midst of the silence and solemnity of the scene, the bones were placed in a coffin and the service of the Church of England read over them. They were then committed to the deep, beneath the booming thunders of the artillery of both vessels. "What our feelings were on this occasion," says King, "I leave the world to conceive. Those who were present know that it is not in my power to express them."

No one man ever contributed more to any science than did Captain Cook to that of geography. We have seen that, on his first voyage, he discovered the Society Islands, determined the insular character of New Zealand, discovered the straits which cut that island in halves, and made a complete survey of both portions. He explored the eastern coast of New Holland, gave Botany Bay its name, and surveyed an extent of upwards of two thousand miles. In his second voyage he resolved the problem of a Southern continent, having traversed that hemisphere in such a manner as to leave no probability of its existence, unless near the Pole, out of the reach of navigation, and beyond the habitable limits of the globe. He discovered New Caledonia, the largest island in the South Pacific except New Zealand ; he settled the situations of numerous old discoveries, rectifying their longitude, and remodelling all the charts. On his third voyage he discovered, to the north of the equator, the group called the Sandwich Islands,-a discovery which, all things considered, and from their situation and products, may be said to be the most important acquisition ever made in the Pacific. He explored what had hitherto remained unknown of the western coast of America, - an extent of three thousand five hundred miles.and ascertained the proximity of the two great continents of Asia and America. "In short," says King, "if we except the Sea of Amur, and the Japanese Archipelago, which still remain imperfectly known to the Europeans, he has completed the hydrography of the habitable globe." After Christopher Columbus, Cook acquired, and now, at a distance of nearly a century, still enjoys, the highest degree of popularity which ever fell to the lot of a navigator and discoverer.

CHAPTER XIII.

LAPÉROUSE-TRANSPLANTATION OF THE BREAD-FRUIT TREE-WILLIAM BLIGH.

UPON the perusal of the voyages, discoveries, and services of Cook, Louis XVI., king of France, conceived the idea of sharing in the glory which the English were reaping from maritime adventure and exploration. He drew up a plan of campaign with his own hand, ordered the two frigates Boussole and Astrolabe to be prepared for sea, and gave the command to Jean-François Galaup de la Pérouse, better known as Lapérouse. The vessels were supplied with every conceivable accessory. The fleet sailed from Brest on the 1st of August 1785, and arrived at Concepcion, in Chili, late in February 1786.

After a short stay here, the two frigates again put to sea, and, early in April, anchored in Cook's Bay, in Easter Island. Here the two commanders landed, accompanied by about seventy persons, twelve of whom were marines armed to the teeth. Five hundred Indians awaited them, the greater part naked, painted, and tattooed, some wearing bunches of odoriferous herbs about their loins, and others being covered with pieces of white and yellow cloth. None. of them were armed, and, as the boats touched the land, they advanced with alacrity to aid the strangers in their disembarkation. The latter marked out a circular space, where they set up a tent, and enjoined it strongly upon the islanders not to intrude upon this enclosure. The number of the natives had now increased to eight hundred, one hundred and fifty of whom were women. While the latter would seek, by caresses and agreeable pantomime, to withdraw the attention of the Frenchmen from passing events, the men would slyly pick their pockets. Innumerable handkerchiefs were pilfered in this way; and the thieves, emboldened by success, at last seized their caps from their heads and rushed off with them. It was noticed that the chiefs were the most adroit and successful plunderers, and that though, for appearance' sake, they sometimes ran after an offender, promising to bring him back, it was evident that they were running as slowly as they could, and that their object was rather to facilitate than to prevent their escape. Lapérouse was not saved from spoliation by his rank : A polite savage, having assisted him over an obstruction in the path, removed his chapeau and fled with the utmost rapidity. On re-embarking to return to the ships, only three persons had handkerchiefs, and only two had caps. Lapérouse stayed but a day on this island, having nothing to gain and everything to lose. There was no fresh water to be found, the natives drinking sea-water like the albatrosses of Cape Horn. In return for the hospitality with which they had been received, Lapérouse caused several fertile spots to be sown with beets, cabbages, wheat, carrots, and squashes, and even with orange, lemon, and cotton seeds. "In short," says Lapérouse, "we loaded them with presents, overwhelmed with caresses the young and children at the breast; we sowed their fields with useful grains; we left kids, sheep, and hogs to multiply upon their island ; we asked nothing in exchange ; and yet they robbed us of our hats and handkerchiefs, and threw stones at us when we left." The following reflection, which concludes Lapérouse's account of Easter Island, could only have proceeded from a Frenchman :---"I decided to depart during the night, flattering myself that when, upon the return of day, they should find our vessels gone, they would attribute our departure to our just resentment at their conduct, and that this conclusion might render them better members of society."

On the 23d of June, in latitude 60° north, Lapérouse

struck the American coast. He recognised at once Behring's Mount St. Elias, whose summit pierced the clouds. From this point southward, as far as Monterey, in Mexico, lay an extent of coast which Cook had seen but not surveyed. The exploration of this coast was a work essential to the interests of navigation and of commerce; and, though the season only allowed him three months, he executed it in a manner creditable to the navy of France. He discovered a harbour that had escaped the notice of preceding navigators, which seems to have been a remarkable place. The water is unfathomable, and is surrounded by precipices rising perpendicularly from the water's edge into regions of eternal snow. Not a blade of grass, not a green leaf, grows in this desolate and sterile spot. No breeze blows upon the surface of the bay; its tranquillity is never troubled except by the fall of enormous masses of ice from overhanging peaks. The air is so still and the silence so profound, that the noise made by a bird in laying an egg in the hollow of a rock is distinctly heard at the distance of a mile and a half ! This wonderful bay Lapérouse named Frenchport.

A painful accident occurred as the vessels, after a somewhat prolonged stay, were about departing from the spot. Three boats, manned by twenty-seven men and officers, were sent to make soundings in the bay, in order to complete the survey. They had strict orders to avoid a dangerous current, but became involved in it unawares. Two boats' crews perished, consisting of twenty-one men, the greater part of them under twenty-five years of age. Two brothers, by the name of Laborde, whom their superior officers always sent together on missions of peril, were among the victims of the disaster. A monument was erected to their memory, and a record buried in a bottle beneath it. The inscription was thus conceived :---

"At the entrance of this bay twenty-one brave sailors perish'd: Whoever you may be, mingle your tears with ours."

Early in June, Lapérouse entered a sea never before

ploughed by a European keel; and as it was only known from Japanese or Corean charts, published by the Jesuits, it was his first object either to verify their surveys or to correct their errors. As the Jesuits travelled and made their calculations by land, Lapérouse added hydrographic details and observations to their data, which he found quite generally correct. His voyage in these latitudes set many doubts at rest. At Kamschatka, letters and despatches were received from France, intimating that Lapérouse had been promoted in rank. M. de Lesseps, the interpreter, was here detached from the expedition, with the ships' journal, which was afterwards published in France.

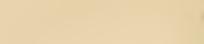
The track of Lapérouse was now directly south, through the heart of the Pacific Ocean. He touched on the 9th of December at Maouna, one of Navigator's Isles. The vessels were at once surrounded by a hundred or more canoes filled with pigs and fruit, which the natives would only exchange for glass beads, which in their eyes were what diamonds are to Europeans. Delangle, the captain of the Astrolabe, went ashore with the watering party. The islanders made no objection to their landing their casks ; but as the tide receded, leaving the boats high and dry upon the beach, they became troublesome, and finally forced Delangle to a trial of his muskets. For this they took a sanguinary vengeance. Delangle was killed by a single blow from a club, as was Lamanon, the naturalist. Eleven marines were savagely murdered, while twenty were seriously wounded. The rest escaped by swimming. Lapérouse did not feel himself sufficiently strong to attempt reprisals. The natives hurled stones with such force and accuracy that they were more than a match for as many musketeers. Besides, he had lost thirty-two men and two boats, and his situation generally was such that the slightest mischance would now compel him to disarm one frigate in order to refit the other. It was late in January 1788 that he arrived at Botany Bay in New Holland, the last place in which he was ever seen alive or dead.



STONES A MATCH FOR MUSKETS.

LAPÉROUSE AND THE NATIVES OF NAVIGATOR'S ISLES.

Delangle, the captain of the Astrolabe, was killed by a single blow from a club, as was Lamanon, the naturalist. Eleven marmes were savagely murdlered, while twenty were seriously wounded. The rest escaped by swimming. The natives harled stones with such force and accuracy that they were more than a match for as many muscketers. $-P_{AGB} \ge 10$.



His last letter to the Minister of Marine was dated at Botany Bay, the 7th of February. In this he stated the route by which he intended to return home, and the dates of his anticipated arrivals at various points. His plan was to visit the Friendly Islands, New Guinea, and Van Diemen's Land, and to be at the Isle of France, near Madagascar, at the beginning of December. His letter arrived in due course at Paris, where the public mind was too much agitated by the throes of revolution to pay much heed to matters of such remote interest. At last, in the year 1791, the Society of Natural History called the attention of the Constituent Assembly to the fate of Lapérouse and his companions. The Assembly then sent two ships to Botany Bay, with orders to steer the same course from that place that Lapérouse had traced out for himself. Some of his followers, it was thought, might have escaped from the wreck, and might be confined on a desert island or thrown upon some savage coast. The expedition was under the command of Rear-Admiral d'Entrecasteaux, and returned in two years, without having obtained the slightest clue to the fate of Lapérouse. Their commander died of scurvy at Java.

In the year 1813, Captain Dillon, in the service of the British East India Company, putting in at one of the Feejee Islands, found there two foreign sailors, one of whom was a Prussian, the other a Lascar. At their request he trans-· ported them to the neighbouring island of Tucopia, where he left them, the natives expressing no hostility toward them nor objections to their stay. In 1826, thirteen years afterward, Captain Dillon again touched at Tucopia, where he found them comfortable and contented. The Lascar sold the armourer a silver sword-hilt of French manufacture, and bearing a cipher engraved upon it. It resulted from Dillon's inquiries that the natives had obtained many articles of iron and other metals from a distant island named Manicolo, where, as they said, two European ships had been wrecked forty years before. It immediately occurred to Dillon that this circumstance was connected with the fate of Lapérouse.

He at once sailed with the Prussian to Manicolo, but was prevented from landing by the surf and the coral reef.

In 1827, Dumont d'Urville was sent out by the French Government in the sloop-of-war Astrolabe to explore the great archipelagoes of the Pacific, with authority to follow up any clue he might discover to the fate of Lapérouse. At Hobart Town he heard some account of the efforts made by Dillon, and determined to conclude what he had begun. He sailed at once for Manicolo, and after examining the eastern coast of the island without success, proceeded to the Here he found numerous articles of European western. manufacture in possession of the savages, who refused to say whence they had obtained them, or to point out the scene of any catastrophe or shipwreck. At last, the offer of a piece of red cloth induced a painted islander to conduct a boat's crew to the spot which is now regarded as that at which the lamented commander and his vessels met their untimely fate. Scattered about in the bed of the sea, at the depth of about twenty feet, lay anchors, cannon, and sheets of lead and copper sheathing, completely corroded and disfigured by rust. They succeeded in recovering many of them from the water-an anchor of fourteen hundred pounds, a small cannon coated with coral, and two brass swivels, in good preservation. Thus possessed of evidence which after the lapse of forty years must be considered as conclusive, d'Urville erected near the anchorage a cenotaph to the memory of the hapless navigator.

The islanders were now profuse in their explanations of the circumstances attending the calamity. As far as d'Urville could interpret their language and their pantomime, the ships struck upon the reef during a gale in the night. One speedily sank, only thirty of her crew escaping ; the other remained for a time entire, but afterwards went to pieces, her whole crew having been saved. From her timbers they constructed a schooner, in which labour they occupied seven moons or months, and then sailed away. What befell them after their second embarkation, what was the fate of their daring

242

little vessel, if indeed any such was ever built, no one has survived to tell. It is safe to believe that both vessels were lost upon the island of Vanikoro, now one of the archipelago of the New Hebrides. It is supposed that Lapérouse was the first European navigator that visited it, Dillon the second, and d'Urville the third.

In the year 1787, the merchants and planters of England, interested in the West India possessions, petitioned the king to cause the bread-fruit tree to be introduced into these islands; and, in accordance with this request, the armed transport Bounty, of two hundred and fifteen tons, was fitted out at Deptford with the proper requisites. Lieutenant William Bligh, who had been round the world with Cook, was appointed to command her. Her cabin was fitted with a false floor cut full of holes sufficient to receive one thousand or more garden-pots. She was victualled for fifteen months, and laden with trinkets for the South Sea Islanders. Her destination was Tahiti by way of Cape Horn. She sailed late in December 1787.

After a three months' tempestuous passage, she made the eastern coast of Terra del Fuego. She contended thirty days here with violent westerly gales, seeking either to thread the strait or double the cape. Finding either course impossible, Bligh resolved to cross the South Atlantic and approach Tahiti from the westward—a determination which was successfully executed. He gave directions to all on board not to inform the natives of the object of their visit, lest the price-current of bread-fruit trees should suddenly rise. He contrived to make the chiefs believe that he was doing them a favour in conveying specimens of their plants to the great King of England. A tent was erected on shore to receive the trees, some thirty of which were potted every day. On the 4th of April 1789, the vessel set sail, with one thousand and fifteen roots in pots, tubs, and boxes.

It was now that an event took place which rendered the cruise of the Bounty one of the most extraordinary in the annals of the sea. A mutiny, which had been planned in secrecy, broke out on the 27th. The whole crew were engaged in it, with the exception of eighteen men. Bligh, with these eighteen—most of them officers—was hurried into the launch, which was cut loose, with one hundred and fifty pounds of bread, twenty-eight gallons of water, a little rum and wine, with a quadrant and compass. A few pieces of pork, some cocca-nuts, and four cutlasses, were thrown at them as they were cast adrift. Some of the mutineers laughed at the helpless condition of the launch ; while others expressed their confidence in Bligh's resources by exclaiming, with oaths, "Pshaw ! he'll find his way home if you give him pencil and paper !" "He'll have a vessel built in a month !"

Defenceless and unarmed, Bligh saw they had nothing to hope from the inhabited islands of the surrounding waters. He told the crew that no chance of relief remained except at Timor, where there was a Dutch colony, at a distance of three thousand five hundred miles. They all agreed, and bound themselves by a solemn promise, to live upon one ounce of bread and a gill of water a day. They then bore away across this unknown and barbarous sea, in a boat twenty-three feet long from stem to stern, deep-laden with nineteen men, and barely supplied with food for two. There is nothing in maritime annals more marvellous than this voyage from Tahiti to Timor.

The first thing done was to return thanks to God for their preservation, and to invoke his protection during the perils they were to encounter. The sun now rose fiery and red, foreboding a severe gale, which, before long, blew with extreme severity. The sea curled over the stern, obliging them to bale without cessation. The bread was in bags, and in danger of being soaked and spoiled. Unless this could be prevented, starvation was inevitable. Everything was thrown overboard that could be spared,—even to suits of clothes: the bread was then secured in the carpenter's chest. A teaspoonful of rum and a fragment of bread-fruit

-collected from the floor of the boat, where it had been crushed in the confusion of departure-was now served to each man. They constantly passed in sight of islands, upon which they did not dare to land. They kept on, alternately praying, dining on damaged bread, and sipping infinitesimal quantities of rum or other cordial. On grand occasions, Bligh served out as the day's allowance a quarter of a pint of cocoa-nut milk and two ounces of meat. One half of the men watched while the other half slept with nothing to cover them but the heavens. They could not stretch out their limbs for want of room : they became dreadfully cramped, and at last the dangers and pains of sleep were such that it became an additional misery in their catalogue of sorrows. A heavy thunder-shower enabled them to quench their thirst for the first time and to increase their stock of water to thirty-four gallons : but it wet them through and caused them to pass a cold and shivering night. The next day the sun came out, and they stripped and dried their clothes. Bligh thought the men needed additional comfort under these dismal circumstances, and issued to each an ounce and a half of pork, an ounce of bread, a teaspoonful of run, and half a pint of cocoa-nut milk. They kept a fishing-line towing from the stern ; but in no instance did they catch a fish.

Bligh now became convinced that in serving ounces of bread by guess-work he was dealing out over-measure, and that if he continued to do so his stores would not last the eight weeks he had intended they should. So he made a pair of scales of two cocoa-nut shells, and having accidentally found a pistol-ball, twenty-five of which were known to weigh a pound or sixteen ounces, he adopted it as the measure of one ration of bread. The men were thus reduced from one ounce to two hundred and seventy-two grains. Another thunder-shower now came on, and they caught twenty gallons of water. The usual consolation of a thimbleful of rum was served when the storm was over, together with one mouthful of pork. The men soon began to complain of pains in the bowels; and nearly all had lost, in a measure, the use of their limbs. Their clothes would not dry when taken off and hung upon the rigging, so impregnated was the atmosphere with moisture. On the fifteenth day they discovered a number of islands, which, though forming part of the group of the New Hebrides, had been seen neither by Cook nor Bougainville, and thus, in the midst of their agonies, the satisfaction of contributing to geographical science was, as it were in derision, awarded to them. The men now clamoured for extra allowances of pork and rum—which Eligh sternly refused, administering his bullet-weight of bread with the severest economy.

"At dawn of the twenty-second day," says Bligh, "some of my people seemed half dead : our appearances were horrible, and I could look no way but I caught the eye of some one in distress. Extreme hunger was now too evident ; but no one suffered from thirst, nor had we much inclination to drink—that desire, perhaps, being satisfied through the skin. Every one dreaded the approach of night. Sleep, though we longed for it, afforded no comfort : for my own part, I almost lived without it." Bligh now examined the remaining bread, and found sufficient to last for twenty-nine days ; but as he might be compelled to avoid Timor and go to Java, it became necessary to make the stock hold out for forty days. He therefore announced that supper would hereafter be served without bread !

A great event happened on the twenty-seventh day. A noddy—a bird as large as a small pigeon—was caught as it flew past the boat. Bligh divided it, with the entrails, into nineteen portions, and distributed it by lots. It was eaten, bones and all, with salt water for sauce. The next day a booby—which is as large as a duck—was caught, and was divided and devoured like the noddy, even to the entfails, beak, and feet. The blood was given to three of the men who were the most distressed for want of food. On the thirtieth day they landed upon the northern shore of New Holland, and gave thanks to God for his gracious protection

246

through a serious of disasters and calamities almost unparalleled.

They found oysters upon the rocks, which they opened without detaching them. A fire was made by the help of a magnifying-glass; and then, with the aid of a copper pot found in the boat, a delicious stew of oysters, pork, bread, and cocoa-nut was cooked. Spring water was obtained by digging where a growth of wire grass indicated a moist situation. The soft tops of palm-trees and fern-roots furnished a very palatable addition to their mess. After laying in sixty gallons of water and as many oysters as they could collect, they re-embarked, having slept two nights on land, and been greatly benefited thereby. Keeping north-west-ward, and coasting along the shore, they landed from time to time in search of food. On the 2d of June, the watch of the gunner, which had been the only one in the company successfully to resist the influences of the weather, finally stopped, so that sunrise, noon, and sunset were now the only definite points in the twenty-four hours. On the next day, having followed the north-eastern shore of New Holland as far as it lay in their route, they once more launched into the open sea.

On Thursday, the 11th, they passed, as Bligh supposed, the meridian of the eastern point of Timor—a fact which diffused universal joy and satisfaction. On Friday, at three in the morning, the island was faintly visible in the west, and by daylight it lay but five miles to the leeward. They had run three thousand six hundred and eighteen miles in an open boat in forty-one days with provisions barely sufficient for five. Though life had never been sustained upon so little nourishment for so long a time, and under equal circumstances of exposure and suffering, not a man perished during the voyage. Their wants were most kindly supplied by the Dutch at Coupang, and every necessary and comfort administered with a most liberal hand.

On his return to England, Bligh published a narrative of his voyage and of the mutiny, which was soon translated into all the languages of Europe. He ascribed the revolt to the desire of the crew to lead an idle and luxurious life at Tahiti, though subsequent developments, and his own conduct when Governor of New South Wales, seem to show that his cruelties and tyranny had rendered him odious and intolerable. The British Government could not allow such a transaction upon the high seas to pass unpunished, and despatched the frigate Pandora, Captain Edwards, to Tahiti in the month of August. Only ten of the mutineers were found, the rest having withdrawn to another island through fear of discovery, as we shall now relate, merely stating that the ten persons taken were conveyed to England, where they were tried and executed.

John Adams, one of the mutineers, being apprehensive that the English Government would make an attempt to punish the revolt, resolved to escape to some neighbouring and uninhabited island, and there establish a colony. With eight Englishmen, one of whom was Christian, the ringleader in the mutiny, their Tahitian wives, and a few islanders of both sexes, he sailed in the Bounty to Pitcairn's Island, which had lately been seen by Carteret. They arrived there in 1790, and, having unladen the vessel, burned her. A settlement was formed, which prospered in spite of the continual quarrels between the males of the two races. This hostility resulted, in three years, in the extinction of the savages, leaving upon the island Adams, three Englishmen, ten women of Tahiti, and the children, some twenty in number. One of the Englishmen, having succeeded in distilling brandy from a root which grew in abundance, drank to excess and threw himself headlong from a rock into the sea. Another was slain for entertaining designs upon the wife of the only remaining Englishman except Adams. Thus, in 1799, Adams and Young were the only males of the original colony surviving. Thev began to reflect upon their duties toward their children and those of their companions : they commenced holding religious services morning and evening, and instructed the

rising generation in such rudimental branches of education as their own learning would permit. Young died in 1801, and Adams became the administrator and patriarch of the colony. He was assisted by the Tahitian women, who showed a remarkable capacity for civilisation and aptitude for refinement. An English frigate, the Briton, touched at Pitcairn in 1814, and her captain offered to take Adams back to England, promising to procure his pardon from the king. But the forty-seven persons, women and children, forming the settlement, besought their patriarch not to leave them. In 1825 Captain Beechev visited the island, and found the population increased to sixty-six. Adams was sixty years old, but still vigorous and active. He begged Beechey to marry him, according to the rites of the Euglish Church, to the woman with whom he had lived, and who was now infirm and blind. Beechey gladly acceded to the request. Soon after, an English missionary, named Buffet, went out to Pitcairn to assist Adams in the discharge of his duties and to succeed him upon his death. The latter event occurred in 1829. Vessels occasionally stopped at Pitcairn, and the English Government was thus kept informed of the progress of its interesting colony.

In 1856, the descendants of the original settlers, having increased so much as to outgrow the resources of their seagirt home, abandoned Pitcairn's Island, and transferred themselves, with their goods and chattels, to Norfolk Island, directly west and toward New South Wales. They numbered one hundred and ninety-nine in all, the oldest man being sixty-two, and the oldest woman eighty. Their new home contains about fourteen thousand acres, and is well watered, fertile, and healthy, the soil producing abundantly both European and tropical fruits, vegetables, grains, and spices. The history of the colony, the offspring of European fathers and Tahitian mothers, is as remarkable as any tale in romance or any legend in mythology.

21

CHAPTER XIV.

ARCTIC EXPLORATIONS.

WE have now entered the nineteenth century. From this time forward we shall find no romantic interest attaching to the history of the sea, with the single exception of that of the Arctic waters. The epoch of adventure stimulated by the thirst for gold has long since passed : there are no more continents to be pursued, and few islands to be unbosomed from the deep. There was once a harvest to be reaped : but there remain henceforward but scanty leavings to be gleaned. The navigator of the present century cannot hope to acquire a rapid fame by brilliant discoveries : he must be content if he obtain a tardy distinction by patient observation and minute surveys-a task far more useful than showy, and, while less attractive, much more arduous. Our narrative, therefore, will attach exclusively to the Polar adventures of the heroes of the North-west Passage : of Ross, who saw the Crimson Cliffs ; of Parry, who discovered the Polar Sea; of James Clarke Ross, who stood upon the North Magnetic Pole ; of M'Clure, who threaded the North-west Passage; of Franklin and of Kane, the martyrs to Arctic science.

In the winter of 1816, the whalers returning from the Greenland seas to England reported the ice to be clearer than they had ever known it before. The period seemed favourable for a renewal of Arctic exploration; and in 1818 the Admiralty fitted out two vessels—the Isabella and 250

Alexander-for the purpose. Captain John Ross was sent in the first to discover a north-west passage, and Lieutenant Edward Parry in the second, to penetrate if possible to the Pole. Their instructions required them to examine with especial care the openings at the head of Baffin's Bay. Sailing on the 18th of April, they reached the coast of Greenland on the 17th of June. They saw tribes of Esquimaux who had never seen men of any race but their own, and who felt and testified an indescribable alarm at the sight of the adventurers. It was subsequently proved that what they feared was contagion. Quite at the northern extremity of the bay, Ross observed the phenomenon which has given so romantic, almost legendary, a character to his voyage,-that of red snow. He saw a range of peaks clothed in a garb which appeared as if borrowed from the looms and dyes of Tyre. The spot is marked upon the maps as "The Crimson Cliffs." The colour was at the time supposed to be a quality inherent in the snow itself; but subsequent investigations have established its vegetable origin.

The ships were now at the northern point of Baffin's Bay, among the numerous inlets which Baffin had failed to explore. They all appeared to be blocked up with ice, and none of them held out any flattering promise of concealing within itself the long-sought North-west Passage. Smith's Strait, where the bay ends, was carefully examined ; but it proved to be enclosed by ice. Returning towards the south by the western coast of the bay, they arrived at the entrance of Lancaster Sound on the 30th of August, just as the sun. after shining unceasingly for nearly three months, was beginning to dip under the horizon. The vessels sailed up the sound some fifty miles, through a sea clear from ice, the channel being surrounded on either hand by mountains of imposing elevation. It was here that Ross committed the mistake which was to cloud his own reputation and to put Parry, his second, forward as the first of Arctic navigators. He asserted, and certainly believed, that he saw a high ridge of mountains stretching directly across the passage.

This, he thought, rendered farther progress impracticable, and the order was given to put the ships about. Ross returned to England, convinced that Baffin was correct in regarding Lancaster Bay as a bay only, without any strait beyond. It was destined that Parry should thread the strait and find the Polar Sea beyond.

In the same year the British Government sent an expedition under Captain Buchan and Lieutenant (afterwards Sir John) Franklin, to endeavour to reach the Pole. The objects were to make experiments on the elliptical figure of the earth, on magnetic and meteorological phenomena, and on the refraction of the atmosphere in high latitudes. The two vessels-the Dorothea and Trent-sailed in April 1818, and made their way to Magdalena Bay, in Spitzber-In latitude 74° north, near an island frequented by gen. herds of walruses, a boat's crew was attacked by a number of these animals, and only escaped destruction by the presence of mind of the purser. He seized a loaded musket, and plunging the muzzle into the throat of the leader of the school, discharged its contents into his bowels. As the walrus sinks as soon as he is dead, the mortally-wounded animal at once began to disappear beneath the water. His companions abandoned the combat to support their chief with their tusks, whom they hastily bore away from the scene of action.

The climate here was mild, the atmosphere pure and brilliant, and the blue of the sky as intense as that of Naples. Alpine plants, grasses, moss, and lichens, flourished in abundance, and afforded browsing pasturage to reindeer at the height of fifteen hundred feet above the sea. The shores were alive with awks, divers, cormorants, gulls, walruses, and seals. Eider-ducks, foxes, and bears preyed and prowled upon the ice; and the sea furnished a home to jaggers, kittiwakes, and whales. Having ascended as high as 80° 34' N., and finding it impossible to penetrate farther to the north, Buchan resolved to quit the waters of Spitzbergen

and stand away for those of Greenland. A pack of floating icebergs, upon which the waves were beating furiously, beset the ships. The Trent came violently in collision with a mass many hundred times her size. Every man on board lost his footing ; the masts bent at the shock, while the timbers cracked beneath the pressure. This accident rendered a prosecution of the voyage impracticable, and the two ships returned to England, where they arrived in October. The expedition thus failed of the main object it was intended to accomplish.

As we have already remarked, Ross neglected the opportunity of penetrating to the interior of Lancaster Sound. The Government, encouraged by Lieutenant Parry to believe that the supposed chain of mountains barring the passage had no existence but in Ross's imagination, gave him the command of two ships, strongly manned and amply stored, for the prosecution of discovery in that direction. He left England on the 11th of May 1819, with the ship Hecla and the gun-brig Griper. On the 15th of June he unexpectedly saw land,—which proved to be Cape Farewell, the southern point of Greenland, though at the distance of more than a hundred miles. The ships were immovably "beset" by ice on the 25th : their situation was utterly helpless, all the power that could be applied not availing to turn their heads a single degree of the compass.

The officers and men occupied themselves in various manners during this period of inaction. Observations were made on the dip and variation of the magnetic needle, and lunar distances were calculated. White bears were enticed within rifle distance by the odour of fried red herrings, and then easily shot. On the 30th the ice slackened, and after eight hours' incessant labour, both ships were moved into the open sea. On the 12th Parry obtained a supply of pure water which was flowing from an iceberg, and the sailors shook from the ropes and rigging several tons' weight of congealed fog. The passage to Lancaster Sound was laborious, and was only effected by the most persevering efforts on the part of all.

An entrance into the sound was effected on the 1st of August : and Parry felt, as did the officers and men, that this was the point of the voyage which was to determine the success or failure of the expedition. Reports, all more or less favourable, were constantly passed down from the crow's nest to the quarter-deck. The weather was clear, and the ships sailed in perfect safety through the night. Towards morning all anxiety respecting the alleged chain of mountains across the inlet was at an end ; for the two shores were still forty miles apart, at the distance of one hundred and fifty miles from the mouth of the channel. The water was now as free from ice as the Atlantic; and they began to flatter themselves that they had fairly entered the Polar Sea. A heavy swell and the familiar ocean-like colour which was now thought to characterize the water were also encouraging circumstances. The compasses became so sluggish and irregular that the usual observations upon the variation of the needle were abandoned. The singular phenomenon was soon for the first time witnessed of the needle becoming so weak as to be completely controlled by local attraction, so that it really pointed to the north pole of the ship,-that is, to the point where there was the largest quantity of iron.

Ice for a time prevented the farther western progress of the vessels, and they sailed one hundred and twenty miles to the south, in a sound which they called Prince Regent's Inlet. Parry suspected, though incorrectly, that this inlet communicated with Hudson's Bay. Returning to the mouth of the inlet, he found the sea to the westward still encumbered with ice; but a heavy blow, accompanied with rain, soon broke it up and dispersed it. They proceeded slowly on, naming every cape and bay which they passed : an inlet of large size they called Wellington, "after his Grace the Master of the Ordnance." Being now convinced that the passage through which they had thus far ascended was a strait connecting two seas, Parry gave it the name of Barrow's Strait, after Mr. Barrow, Secretary of the Admiralty. The prospects of success during the coming six weeks were now felt by the commander of the expedition to be "truly exhilarating."

An island—by far the largest Parry had seen in these waters—appeared early in September, and the men worked their arduous way along its southern coast, till, on the 4th, they reached the longitude of 110° west. The two ships then became entitled to the sum of £5000, the reward offered by Parliament to the first of His Majesty's subjects that should penetrate thus far to the westward within the Arctic Circle. The island was called Melville Island, from the First Lord of the Admiralty. In a bay named The Bay of the Hecla and Griper, the anchor was dropped for the first time since leaving England; the ensigns and pennants were hoisted, and the British flag waved in a region believed to be without the pale of the habitable world.

The summer was now at its close, and it became necessary to make a selection of winter quarters. A harbour was found, a passage-way cut through two miles of ice, and the ships settled in five fathoms' water : they were soon firmly frozen in at a cable's-length from the shore. Hunting, botanizing, excursions upon the island, experiments in an observatory erected on shore, and amateur theatricals, afforded some relief from the unavoidable inactivity to which officers and crew were now condemned. Parry had named the group of islands of which Melville is the largest, the North Georgian Islands, in honour of King George ; and during the days of constant darkness a weekly newspaper, entitled *The North Georgia Gazette and Winter Chronicle*, was edited by Captain Sabine, the astronomer.

The sun reappeared on the 3d of February 1820, after an absence of ninety-one days. The theatre was soon closed and the newspaper discontinued. The ice around the ships was seven feet thick, though by the middle of May the crews had cut it away so as to allow the ships to float, and had sawed a channel for their boats. On the 1st of August there was not the slightest symptom of a thaw; on the 2d the ice broke up and disappeared with a suddenness altogether inexplicable. Parry determined to return home at once, and arrived at Leith, in Scotland, towards the close of October. He was received with great favour, and was rewarded for his signal services by promotion to the rank of captain.

Parry made a second voyage in 1821, with instructions to seek a passage by Hudson's Strait instead of by Lancaster Sound. It was totally unsuccessful. He made a third attempt, in 1824, with the Fury and the Hecla. The Fury was lost in Lancaster Sound, and Parry returned baffled and for a time disheartened.

In 1827 a new idea was broached with reference to the Pole and the most likely method of reaching it. Captain Parry, despairing of getting there in ships, conceived the plan of constructing boats with runners, which might be dragged upon the ice, or, in case of need, be rowed through the water. The Government approved of the idea, and two boats were specially constructed for the service : each one, with its furniture and stores, weighed three thousand seven hundred and fifty-three pounds. They were placed on board the sloop-of-war Hecla ; and the expedition left the Nore on the 4th of April 1827 for Spitzbergen. At Hammersfeld, in Norway, they took on board eight reindeer and a quantity of moss for their fodder.

After experiencing a series of tremendous gales, being beset in the ice till the 8th of June, the Hecla was safely anchored on the northern coast of Spitzbergen, in Hecla Cove. Parry gave his instructions to his lieutenants, Foster and Crozier, and on the 22d left the ship in the two boats, having named them the Enterprise and Endeavour, with provisions for seventy-one days. The ice appeared so rugged that the reindeer promised to be of little assistance, and were consequently left behind. The following is an abridged account of the extraordinary method of travelling

sun shining from his highest altitudes upon the snow ; and proceeding during the milder light shed during his vicinity to the horizon—for, of course, during the summer, he never set at all. This practice so completely inverted the natural order of things that the officers, though possessing chronometers, did not know night from day. When we rose in the evening we commenced our day by prayers; after which we took off our raccoon-skin sleeping dresses, and put on our box-cloth travelling-suits. We breakfasted upon warm coccoa heated with spirits of wine—our only fuel and biscuit : we then travelled five hours, and stopped to dine, and again travelled four, five, or six hours, according to circumstances. It then being early in the morning, we halted for the night, selecting the largest surface of ice we happened to be near for hauling the boat on. Every man then put on dry stockings and fur boots, leaving the wet ones-which were rarely found dry in the morning-to be resumed after their slumbers. After supper the officers and men smoked their pipes, which served to dry the boat and awnings, and often raised the temperature ten degrees. A watch was set to look out for bears, each man alternately doing this duty for one hour. It now being bright day, the evening was ushered in with prayers. After seven hours' sleep, the man appointed to boil the cocoa blew a reveillé upon the bugle, and thus at nightfall the day was recommenced."

The difficulty of travelling was much greater than had been anticipated. The ice, instead of being solid, was composed of small, loose, and rugged masses, with pools of water between them. In their first eight days they made but eight miles' northing. At one time the men dragged the boats only one hundred and fifty yards in two hours. On the 17th of July they reached the latitude of 82° 14'

28"-the highest yet attained. On the 18th, after eleven hours' exhausting labour, they advanced but two miles ; and on the 20th, having apparently accomplished twelve miles in three days, an observation revealed the alarming fact that they had really advanced but five. The terrible truth burst upon Parry and his officers : the ice over which they were with such effort forcing their weary way was actually drifting to the south ! This intelligence was concealed from the men, who had no suspicion of it, though they often laughingly remarked that they were a long time getting to this eighty-third degree. They were at this time in 82° 43' 5". The next observation extinguished the last ray of hope : after two days' labour they found themselves in 82° 40'. The drift was carrying them to the south faster than their own exertions took them to the north ! In fact, the drift ran four miles a day. It was evidently hopeless to pursue the journey any farther. The floe upon which they slept at night rolled them back to the point they had quitted in the morning. Parry acquainted the men with the disheartening news, and granted them one day's rest.

The ensigns and pennants were now displayed, the party feeling a legitimate pride in having advanced to a point never before reached by human beings, though they had failed in an enterprise now proved beyond the pale of possibility. They returned without incident of moment to England. Parry did not totally abandon the idea of eventually reaching the Pole over the ice, and as late as 1847 was of the opinion that at a different season of the year, before drifting comes on, the project may yet be realized. Still, no mortal man has ever yet set foot upon the pivot of the axis of the globe ; and it is not venturing too much to predict that no man ever will.

In the year 1828 Sir John Ross applied to the Government for the means of making a second voyage to the Arctic waters of America, and was refused. The next year Mr. Sheriff Booth, a gentleman of liberal spirit, offered to assume the pecuniary responsibilities of the expedition, and empowered Ross to make what outlay he thought proper. He bought and equipped the Victory, a packet-ship plying between Liverpool and the Isle of Man. She had a small high-pressure engine, and paddle-wheels which could be lifted out of the water. She sailed in May 1829. We shall give but a brief account of the incidents of the voyage till we arrive at the event which has made James Clarke Ross, the nephew of Sir John, illustrious—the discovery of the North Magnetic Pole—that mysterious spot towards which for ever points the needle of the mariner's compass.

While in Baffin's Bay, in June, the Victory lost her fore-topmast in a gale ; two of the sailors who were reefing the topsails had barely time to escape with their lives. Proceeding through Lancaster Sound, and then descending to the South into Prince Regent's Inlet, Ross arrived, after coasting three hundred miles of undiscovered shore, at a spot which he thought would furnish commodious winter quarters. The whole territory received the name of Boothia, in honour of the patron of the expedition. Here they remained eleven months, beset by ice ; not even during the months of July and August 1830, did the ship stir from the position in which she was held fast. At last, on the 17th of September, she was found to be free, and the delighted crew prepared for a speedy deliverance. The unfortunate vessel sailed only three miles, however, when she was again firmly frozen in. The engine, which had proved a wretched and most inefficient contrivance, was taken out and carried ashore-an event which was hailed with pleasure by all. "I believe," says Ross, "that there was not a man who ever again wished to see its minutest fragment." Another year of monotony and silence now stared the weather-bound navigators in the face. Six months elapsed before even a land excursion could be attempted ; but in May 1831 occurred the great discovery to which we have referred.

Commander James Clarke Ross was the second officer of the ship. He started in April, with a party, to make explorations inland. The dipping-needle had long varied from 88° to 89°-thus pointing nearly downwards-90° being, of course, the amount of variation from the horizontal line of the ordinary compass which would have made it directly vertical. Commander Ross was extremely desirous to stand upon the wonderful spot where such an effect would be observed, and joined a number of Esquimaux who were proceeding in the direction where he imagined it lay. He determined, if possible, so to set his foot that the Magnetic Pole should lie between him and the centre of the earth. Arriving at a place where the dipping-needle pointed to 89° 46', and being therefore but fourteen miles from its calculated position, he could no longer brook the delay attendant upon the transportation of the baggage, and set forward upon a rapid march, taking only such articles as were strictly necessary. The tremendous spot was reached at eight in the morning of the 1st of June. The needle marked 89° 59'—one minute from the vertical—a variation almost imperceptible. We give the particulars of this most interesting event in the words of the discoverer himself :----

" I believe I must leave it to others to imagine the elation of mind with which we found ourselves now at length arrived at this great object of our ambition : it almost seemed as if we had accomplished everything we had come so far to see and do—as if our voyage and all its labours were at an end, and that nothing now remained for us but to return home and be happy for the remainder of our days.

"We could have wished that a place so important had possessed more of mark or note. It was scarcely censurable to regret that there was not a mountain to indicate a spot to which so much of interest must ever be attached; and I could even have pardoned any one among us who had been so romantic or absurd as to expect that the Magnetic Pole was an object as conspicuous and mysterious as the fabled mountain of Sinbad—that it even was a mountain of iron or a magnet as large as Mont Blanc. But Nature had here erected no monument to denote the spot which she had chosen as the centre of one of her greatest powers.

"As soon as I had satisfied my own mind, I made known to the party the gratifying result of all our joint labour : and it was then that, amidst mutual congratulations, we fixed the British flag on the spot and took possession of the North Magnetic Pole and its adjoining territory in the name of Great Britain and King William the Fourth. We had abundance of materials for building, in the fragments of limestone which covered the beach; and we therefore erected a cairn of some magnitude, under which we buried a canister containing a record of the interesting fact-only regretting that we had not the means of constructing a pyramid of more importance and of strength sufficient to withstand the assaults of time and the Esquimaux. Had it been a pyramid as large as that of Cheops, I am not sure that it would have done more than satisfy our ambition under the feelings of that exciting day. The latitude of this spot is 70° 5' 15", and its longitude 96° 46' 45" west from Greenwich."

We must remark in this connexion that the fixation of the latitude of the Magnetic Pole was the only important element of this discovery ; for, as the Magnetic Pole revolves about the North Pole at the rate of 11' 4" a year, it consequently changes its annual *longitude* by that amount. A quarter of a century has elapsed since its longitude was settled for the year 1831; and this lapse of time involves a change of place of between four and five degrees. It requires no less than eighteen hundred and ninety years to accomplish the cycle of revolution. The latitude of the Pole of course remains unchanged. It will always be sufficient glory for Ross to have stood upon the spot where the Pole then was : the fact that the spot then so marvellous has since ceased to be so is assuredly no cause for detracting from his merit. After this discovery the party returned to the ship.

In September the ice broke up, and the Victory, which had the previous year sailed three miles, this year sailed four. She was again immediately frozen in : the men's courage gave way, and the scurvy began to appear. Their only hope of a final deliverance seemed to be to proceed overland to the spot where the Fury had been lost under Parry in 1824, and to get her supplies and boats. The distance was one hundred and eighty miles to the north. They drank a parting glass to the Victory on the 29th of May 1832, and nailed her colours to the mast. After a laborious journey of one month, they reached Fury Beach, where they found three of the boats washed away, but several still left. These were ready for sea on the 1st of August, when the whole party embarked. They were compelled to return in October, and made preparations for their fourth Polar winter. The season was one of great severity : in February 1833 the first death by scurvy took place. Ross himself and several of the seamen were attacked by the disease. It was not till August that the boats were again able to move. They reached Barrow's Strait on the 17th, and on the morning of the 26th descried a sail. They made signals by burning wet powder, and succeeded in attracting the stranger's attention. She was a whaler, and had been formerly commanded by Ross himself. Thus they were rescued. After a month's delay, the vessel, now filled to its utmost capacity with blubber, sailed for Hull, in England. There Ross and his officers received a public entertainment from the mayor and corporation. The former then repaired to London, reported himself to the Secretary of the Admiralty, and obtained an audience of the king. His Majesty accepted the dedication of his journal, and allowed him to add the name of William the Fourth to the Magnetic Pole. He learned that he had been given up for lost long since, and that parties had been sent out in search of him.

All concerned in this interesting expedition were rewarded by Parliament. Mr. Booth was shortly after knighted; Commander Ross was made post-captain; the other officers received speedy promotion ; and Government paid the crew the wages which had accrued beyond the period of fifteen months for which they were engaged—amounting in all to $\pounds 4580$. A select committee of the House of Commons was appointed to consider the claims of Captain Ross himself, and concluded its labours by recommending that a sum of $\pounds 5000$ be voted to him by Parliament.

In 1836, the English Government appointed Captain George Back-who had lately been upon a land-expedition in the American Arctic regions in search of Captain and Commander Ross-to the since celebrated ship Terror, for the purpose of determining the western coast-line of Prince Regent's Inlet. The voyage, though entirely unsuccessful, is one of the most remarkable on record-showing as it did a power of resistance and endurance in a ship which till then was not believed to belong either to iron or heart of oak. Back proceeded no farther than Baffin's Bay, the Terror remaining for ten months fast in the gripe of its "cradle" or "ice-waggon" as the men called the huge floating berg upon which she rested. He was knighted on his return, and his sturdy ship was put out of commission and docked. It is a subject of regret that so splendid a specimen of marine architecture, as far as strength and solidity are concerned, should have met the fate which she has encountered. Where she is no mortal knows, except perhaps a few inaccessible Esquimaux : for she has disappeared with her consort. the Erebus, and their brave commander, Sir John Franklin.

Though the discovery of a North-west Passage—if one existed—was no longer expected to afford a short and commodious commercial route to the Indies and to China, still the scientific and romantic interest of the subject was so powerful, that Great Britain resolved to make one last attempt, and selecting two vessels whose fame was now world-wide, appointed Sir John Franklin to their command, —the Erebus being his flag-ship, with Captain Crozier, as his second, in the Terror. The officers and crew, all told, numbered one hundred and thirty-eight picked and resolute The instructions given to Franklin were to proceed. men. with a store-ship ordered to accompany him, as far up Davis' Straits as that vessel could safely go, there to transfer her provisions and send her home. He was then to get into Baffin's Bay, enter Lancaster Sound, thread Barrow's Straits, and follow Parry's track due west to Melville Island, in the Polar Sea. Here the instructions, with an assurance which seems incredible now, begged the whole question of a Northwest Passage, and directed him to proceed the remaining nine hundred miles which separate that point from Behring's Strait.—a region which it was hoped would be found free from obstruction. He was not to stop to examine any opening to the northward, but to push resolutely on to Behring's Strait, and return home by the Sandwich Islands and Panama. He sailed from the Thames on the 19th of May 1845. He received the store-ship's cargo in Davis' Straits, and then despatched her home. His two ships were seen by a whaler named the Prince of Wales on the 26th of July: they were in the very middle of Baffin's Bay, moored to an iceberg and waiting for open water.

Two years passed away, and nothing being heard from them, the public anxiety respecting them became very great. The Government determined to attempt their rescue, and sent out three several expeditions in 1848. The two first —one overland to the Polar Sea, under Richardson and Rae, another by Behring's Strait, in the ships Herald and Plover—totally failed of success, as they were founded upon the supposition that Franklin had advanced farther westward than Parry in 1820,—a supposition altogether unlikely. The third—consisting of the Enterprise and Investigator, under Captain Sir James Clarke Ross—was equally unsuccessful, though conducted in a quarter where success was at least possible. At Port Leopold, at the mouth of Prince Regent's Inlet, Ross formed a large depôt of provisions, the locality having been admirably chosen, being upon Parry's route to the Polar Sea, and upon any track Franklin would be likely to take on his way back, in case he had already advanced beyond it. His men built a house upon shore of their spare spars, and covered it with such canvas as they could dispense with. They lengthened the Investigator's steam-launch, so that it would be capable of carrying Franklin and his crew safely to the whaler's rendezvous, and left it. They then made their way through the ice to Davis' Straits, and arrived in England early in November 1849.

The probable fate of Franklin now absorbed all minds, and the Admiralty, Parliament, the public, and the press eagerly discussed every theory which would account for his prolonged absence, and every means by which succour could be sent to him. The Admiralty offered a reward of one hundred guineas for accurate information concerning him. Lady Franklin offered the stimulus of ± 2000 , and a second of £3000, to successful search ; and the British Government sought to enlist the services of the whalers by announcing a bonus of £20,000. A vessel was sent to land provisions and coal at the entrance to Lancaster Sound. Three new expeditions were sent out in 1850 by the Government. besides one by public subscription, assisted by the Hudson Bay Company, under Sir John Ross, and another by Lady Franklin. They accomplished wonders of seamanship, and their crews endured the most harassing trials ; but we have no space to chronicle anything beyond the finding of a few distinct but unproductive traces of the missing adventurers, which occurred in the following manner :---

Captain Ommaney, of the Assistance and Intrepid, landed on Cape Riley, in Wellington Channel, late in August. There he observed sledge-tracks and a pavement of small stones which had evidently been the floor of a tent. Around were a number of birds' bones and fragments of meat-tins. Upon Beechey Island, three miles distant, were found a cairn or mound constructed of layers of meat-tins filled with gravel, the embankment of a house, the remains of a carpenter's shop and an armourer's forge, with remnants of rope and clothing ; a pair of gloves laid out to dry, with stones upon them to prevent them blowing away. The oval outline of a garden was still distinguishable. But the most interesting and valuable result of these investigations was the finding of three graves with inscriptions, one of which will show the tenor of the whole :---

"Sacred to the memory of William Braine, R.M., of H.M.S. Erebus, who died April 3, 1846, aged thirty-two years. Choose ye this day whom ye will serve.—Josh. xxiv. 15."

This and one of the other inscriptions, dated in January, seemed to fix at this spot the first winter quarters of Franklin,—for 1845-1846. They also show that but three men died during the winter; and three out of one hundred and thirty-eight is not a high proportion of mortality. The seven hundred empty meat-tins seemed to show that the consumption of meat had been moderate; for the ships started with twenty-four thousand canisters. This was the substance of the intelligence obtained during this year of the fate of the wanderers; and it was, as will be noticed, already five years old.

An expedition was also fitted out for the search in 1850, under the combined auspices of Henry Grinnell, Esq., a merchant of New York, and the United States Navy Department,—the former furnishing the ships and the means, the latter the men and the discipline. Two hermaphrodite brigs, the Advance and Rescue,—of one hundred and fortyfour and ninety tons respectively, manned by thirty-eight men, all told, and strengthened for Arctic duty beyond all precedent, were prepared for the service. They were placed under the command of Lieutenant De Haven,—Dr. E. K. Kane, of the Navy, being appointed surgeon and naturalist to the squadron. They sailed from New York on the 23d of May, and in less than a month descried the gaunt coastof Greenland at the moment when the distinction between day and night began to be lost. The Danish inhabitants of the settlement at Lievely made them such presents of furs as their own scanty wardrobes permitted. Two sailors, complaining of sickness, were landed at Disco Island, thence to make the best of their way home.

Thus far the weather had been favourable, and they passed the seventy-fourth degree without meeting ice. On the 7th of July, being still in Baffin's Bay, they encountered the pack. It was summer-ice, consisting of closely-set but separate floes. They could not make over three miles a day headway through it, --- which they considered a useless expenditure of labour. They remained beset for twenty-one days, when the pack opened in various directions. The ships now reached Melville Bay, on the east side of Baffin's Bay, -Lancaster Sound, through which they were to pass, being upon the west. Melville Bay, from the fact that it is always crowded with icebergs, and presents in a bird's-eye view all the combined horrors and perils of Arctic navigation, has received the appellation of the "Devil's Nip." Across this formidable indentation the two vessels made their weary way, occupying five weeks in the transit. A steam-tug would have towed them across in forty-eight hours. In the middle of August the vessels entered Lancaster Sound, and on the morning of the 21st overhauled the Felix, engaged in the search. under the veteran Sir John Ross. The next day the Prince Albert, one of Lady Franklin's ships, was seen, and soon after the intelligence was received of the dis covery of traces of Franklin and his men. The navigators of both nations visited Beechey Island and saw there the evidences which we have already mentioned. The Advance and Rescue now strove in vain to urge their way to Wellington Channel. The sun travelled far to the south, and the brief summer was rapidly coming to a close. The cold increased, and the fires were not yet lighted below. On the 12th of September the Rescue was swept from her moorings by the ice and partially disabled. The pack in which they were enveloped, though not yet beset, was evidently drifting they knew not whither. The commander, convinced

that all westward progress was vain for the season, resolved to return homeward. The vessels' heads were turned eastward, and slowly forced a passage through the reluctant ice. On the evening of the 14th of September, Dr. Kane was endeavouring, with the thermometer at far below zero, to commit a few words to his journal, when he heard De Haven's voice : "Doctor," he said, "the ice has caught us : we are frozen up."

The Advance was now destined to undergo treatment similar to that suffered by the Terror under Captain Back. For eight mortal months she was carried, cradled in the ice, backwards and forwards in Wellington Channel, wherever the winds and currents listed. At first, before the ice around them had become solid, they were exposed to constant peril from "nips" of floating and besieging floes ; but these huge tablets soon became a protection by themselves receiving and warding off subsequent attacks. Early in October, the vessels were more firmly fixed than a jewel in its setting.

They now made preparations for passing the winter. The two crews were collected in the Advance. Until the stoves could be got up, a lard-lamp was burned in the cabin, by which the temperature was raised 12° above zero. The condensed moisture upon the beams from so many breaths caused them to drip perpetually, till canvas gutters were fitted up which carried off a gallon of water a day. The three stoves were soon ready, and these, together with the cooking-galley, diffused warmth through the common room formed by knocking the forecastle and cabin into one. Light was furnished by four argand and three bear's-fat lamps. The entire deck of the Advance was covered with a housing of thick felt. On the 9th of November their preparations were fairly completed.

The sun ceased to rise after the 15th November : after that, the east was as dark at nine in the morning as at midnight ; at eleven there was a faint twilight, and at noon a streak of brown far away to the south. The storeroom would have furnished an amateur geologist with an admirable cabinet, so totally were the eatables and drinkables changed in appearance by the cold. "Dried apples and peaches assumed the appearance of chalcedony; sourkrout was mica, the laminæ of which were with difficulty separated by a chisel; butter and lard were passable marble; pork and beef were rare specimens of Florentine mosaic; while a barrel of lamp-oil, stripped of the staves, resembled a sandstone garden-roller."

The crews soon began to suffer in health and spirits: their faces became white, like celery kept from the light. They had strange dreams and heard strange sounds. The scurvy appeared, and old wounds bled afresh. Dr. Kane endeavoured to combat the disease by acting upon the imagination of the sufferers. He ordered an old tar with a stiff knee to place the member in front of a strong magnet and let it vibrate to and fro like a pendulum. A wonderful and complete cure was thus effected. He practised all sorts of amiable deceptions upon his patients—making them take medicine in salad and gargles in beer. Not a man was lost during the voyage.

From time to time fissures would open in the ice around them with an explosion like that of heavy artillery. It became necessary to make preparations for abandoning the vessel, and sledges, boats, and provisions were gotten ready for an emergency. The men were drilled to leave the ship in a mass at the word of command. The crisis seemed to be upon them many a time and oft ; but the Advance held firmly together, and the ice around her gradually became solid as granite again. Dr. Kane lectured at intervals on scientific subjects, till the return of light brought with it a return of hope and animal spirits. On the 29th of January 1851, the sun rose above the horizon, after an absence of eighty-six days. " Never," says Dr. Kane, " till the grave-clod or the ice covers me, may I forego this blessing of blessings again ! I looked at him thankfully, with a great globus in my throat."

The ice-pack did not open till the close of March. Previous to this, all the successive symptoms of the coming thaw presented themselves. The ice began to smoke, and the surface became first moist and then soft. It was soon too warm to skate, and the cabin lamps that had burned for four months without cessation were extinguished. The mercury rose to 32°; the housings were removed from the Advance, and the Rescue's men returned to their deserted ship. The saw was put in motion early in May; but the grand disruption of the ice, which was either to free the ships or crush them, did not occur till the 5th of June. It was five o'clock in the afternoon when the first crack was heard, and the water, spirting up, was seen following the track of the fissure. In half an hour the ice was seamed with cracks in every direction, some of them spreading into rivers twenty feet across. The Rescue was released at once : the coating of the Advance held on for three days more, parting at last under the weight of a single man. The liberated ships soon made the Greenland coast, at Godhavn, where they spent five days in reposing, and in splicing the main-brace-this latter being a convivial and not a mechanical operation. The vessels arrived safely at the Brooklyn Navy-Yard on the 1st of October 1851. The vessels were restored to Mr. Grinnell, with the stipulation that the Secretary of the Navy might claim them, in case of need, for further search in the spring.

Encouraged by the discovery of traces of her husband, Lady Franklin caused the Prince Albert, upon her return with the intelligence, to be at once refitted for another Arctic voyage. The expedition, though conducted with consummate skill by William Kennedy, late of the Hudson's Bay Company, and Lieutenant Bellot, of the French Navy, his second, totally failed of success. It returned in October 1853. In the meantime, another and more imposing expedition—that under Sir Edward Belcher—had sailed for the polar regions. The squadron consisted of five vessels—

the Assistance, with the steamer Pioneer, the Resolute, with the steamer Intrepid, and the North Star storeship. They sailed on the 28th of April 1852, and arrived at their headquarters at Beechev Island-the scene of Franklin's hibernation in 1846-on the 10th of August. The North Star remained here with the stores, while the two ships, with their respective tugs, started upon distinct voyages of exploration-Sir Edward Belcher, in the Assistance, standing up Wellington Channel, and Captain Kellett, in the Resolute, proceeding to Melville Island. The latter was instructed to seek at this point for intelligence of Captains M'Clure and Collinson, who had been sent to Behring's Strait in 1850, in order to force their way eastward from thence, and who had not since been heard of. As the interest of Sir Edward Belcher's expedition centres entirely in the junction effected by Kellett with M'Clure, we revert to the adventures of the latter explorer, now distinguished as the discoverer of the North-west Passage.

Collinson and M'Clure sailed in the Enterprise and Investigator for Behring's Strait via Cape Horn on the 20th of January 1850. They arrived at the strait in July. The Enterprise, being foiled in her efforts to get through the ice, turned about and wintered at Hong-Kong. M'Clure, in the Investigator, kept gallantly on through the strait, and, during the month of August, advanced to the southeast, into the heart of the Polar Sea, along a coast never yet visited by a ship, and on the 21st August arrived at the mouth of Mackenzie River, discovered by Mackenzie in his land-expedition in 1789 to determine the northern coastline of America. He had now passed the region visited and surveyed in former years by Franklin, Back, Rae, and others, in overland explorations, and, on the 6th of September, arrived at a point considerably to the east of any land marked upon the charts. He now began to name the islands, headlands, and indentations. On the 9th the ship was found to be but sixty miles to the west of the spot to which Parry, sailing westward, had carried his ship in 1820.

Could he but sail these sixty miles, his name would be immortal. "I cannot," he writes, "describe my anxious feelings. Can it be possible that this water communicates with Barrow's Straits, and shall prove to be the long-sought North-west Passage ? Can it be that so humble a creature as I am will be permitted to perform what has baffled the talented and wise for hundreds of years ?" On the 17th, the Investigator reached the longitude of 117° 10' west thirty miles from the waters in which Parry wintered with the Hecla and Griper in a harbour of Melville Island. Alas ! the vessel went no farther east : the ice drifted perceptibly to the west, and it was fated that these thirty miles should remain, as they had remained for ages, as impassable to ships as the Isthmus of Suez.

The Investigator passed the winter heeled four degrees to port and elevated a foot out of water by a "nip," in which position she rested quietly for months. Late in October, a sledge-party of six men, headed by M'Clure, started to traverse on foot the distance which it was forbidden their ship to cross. On the 25th they saw the Polar Ocean ice. The next morning, before daybreak, they ascended a hill six hundred feet high, convinced that the dawn would reveal them the previous surveys of Sir Edward, and make them the discoverers of the North-west Passage, by connecting their voyage from the west with his from the east. The return of day showed their anticipations to be correct : Melville Strait was visible to the north, and between it and them, though there was plenty of ice, there was no intervening land. They had discovered the Passage,-that is, an ice-passage, which of course involved a water-passage when the state of the atmosphere permitted it. Though they regretted bitterly that they could not get their ship through, their only remaining course was to send one of their party home by the well-known route through Barrow's Straits, and thus prove the existence of the passage by the return of one who had made it. They erected a cairn and left a record of their visit, and then commenced their homeward

journey to the ship. M'Clure became separated from his companions, and nearly perished in the snow. He arrived in safety, however, and the grand discovery was duly celeorated and the main-brace properly spliced. Numerous searching parties were now from time to time sent out, and in the middle of July the ice broke up and the Investigator was released. She drifted five miles more to the east,--thus reducing the distance of separation to twenty-five miles. Here she was again firmly and inextricably frozen in. Another and another winter passed ; and it was not till the spring of 1853 that relief reached them. In order to make a consecutive story, we must return to that portion of Sir Edward Belcher's squadron which, under Captain Kellett, was sent to Melville Island, and which arrived there late in 1852. At this period, Kellett, in the Resolute, and M'Clure, in the Investigator, were about one hundred and seventy miles apart.

A sledge-party sent out by Kellett discovered, with the wildest delight, in October 1852, a cairn in which M⁴Clure had deposited, the April previous, a chart of his discoveries. They were compelled to wait the winter through; and it was not till the 10th of March that Kellett ventured to send a travelling-party in quest of the Investigator. The communication was effected on the 6th of April 1853. M⁴Clure thus describes it :---

"While walking near the ship, in conversation with the first lieutenant, we perceived a figure coming rapidly towards us from the rough ice at the entrance of the bay. He was certainly unlike any of our men; but, recollecting that it was possible some one might be trying a new travellingdress preparatory to the departure of our sledges, and certain that no one else was near, we continued to advance. The stranger came quietly on : had the skies fallen upon us we could hardly have been more astonished than when he called out, 'I'm Lieutenant Pim, late of the Herald, now of the Resolute. Captain Kellett is in her, at Dealy Island.' "To rush at and seize him by the hand was the first impulse; for the heart was too full for the tongue to speak. The news flew with lightning rapidity : the ship was all in commotion; the sick, forgetful of their maladies, leaped from their hammocks; the artificers dropped their tools, and the lower deck was cleared of men; for they all rushed for the hatchway, to be assured that a stranger was actually among them and that his tale was true. Despondency fled the ship, and Lieutenant Pim received a welcome—pure, hearty, and grateful—that he will surely remember and cherish to the end of his days."

It was now decided to abandon the Investigator, immovably fixed as she was in the ice. Her colours were hoisted on the 3d of June, and she was left alone in Mercy Bay. The officers and crew arrived on board the Resolute on the 17th. M⁴Clure sent Lieutenant Gurney Cresswell, with despatches for the Admiralty, by sledges, down to Beechey Island, where he found a Government vessel and at once sailed for England. Though he had not made the Northwest Passage, he had at least crossed the American continent within the Arctic Circle ; and this had yet been done by no mortal man.

Kellett and M^cClure remained for many months in the Resolute and Intrepid, beset in the ice. They received instructions from Belcher in April 1854, to abandon their ships. The latter were placed in a condition to be occupied by any Arctic searching-party,—the furnaces of the steamer being left ready to be lighted. Sir Edward Belcher had also been compelled to abandon his vessels, the Assistance and Pioneer : the four crews met at Beechey Island, and embarked on board their store-ship, the North Star, which had been laid up for two years. They arrived in England late in September. The Resolute was found in Baffin's Bay, in 1855, by Captain Buddington, of the New London whaler George Henry. She had forced her way, unaided by man, through twelve hundred miles of Arctic ice. The incidents of her arrival at New London, of the abandonment to the American sailors of all claim upon her by the British Government, of her purchase by the United States Congress from her new owners, her re-equipment at the Brooklyn Navy-Yard, and her restoration to the English Navy by Captain Hartstene, U.S.N., are still fresh in the minds of all.

Soon after the return of Belcher and M'Clure to England, intelligence of Franklin and his party was received. Dr. Rae, who had been engaged for a year past in a search by land, had met a party of Esquimaux who were in possession of numerous articles which had belonged to Franklin and his men. They stated that in the spring of 1850 they had seen forty white men near King William's Land, dragging a boat and sledges over the ice. They were thin and short of provisions : their officer was a tall, stout, middle-aged man. Some months later the natives found the corpses of thirty persons upon the mainland, and five dead bodies upon a neighbouring island. They described the bodies as mutilated ; whence Dr. Rae inferred that the party had been driven to the horrible resource of cannibalism. The presence of the bones and feathers of geese, however, showed that some had survived till the arrival of wild-fowl, about the end of May. Dr. Rae purchased such articles of the natives as would best serve to identify their late possessors. All furnished testimony; but a round silver plate gave strong evidence, bearing as it did the following inscription :--- "Sir John Franklin, K.C.B." The slight clue thus yielded of his fate was the last which had thus far been obtained. The expedition of Dr. Kane had, however, already sailed from New York.

The Government of the United States forwarded to Dr. Kane, in the month of December 1852, an order "to conduct an expedition to the Arctic Seas in search of Sir John Franklin." The brig Advance was again placed at his disposal by Mr. Grinnell, and manned by eighteen picked men. Dr. Kane's plan was to enter Smith's Sound at the top of Baffin's Bay,—into which, alone of the Arctic explorers, Captain Inglefield had penetrated in August 1852, in the Isabel,—to reach, if possible, the supposed northerly open sea, where he hoped to find traces of the missing navigators. He sailed from New York on the 30th of May 1853, touched at Fiskernaes, in Greenland, on the 1st of July, where he engaged the services of Hans Cristian, a native Esquimaux of nineteen years. Through ice and fog the vessel forced her way, and on the 7th of August doubled Cape Alexander, a promontory opposite another named Cape Isabella,—the two being the headlands of Smith's Strait, and styled by Dr. Kane the Arctic Pillars of Hercules.

The vessel closed with the ice again the next day, and was forced into a land-locked cove. Every effort to force her through the floes was tried, without success, and, after undergoing the most appalling treatment from the wind. waves, and ice combined, the brig was warped into winter quarters, in Rensselaer Bay, on the 22d August, and was frozen in on September 10. There she lies to this hour-"to her a long resting-place indeed," writes Kane; "for the same ice is around her still." This was in latitude 78° 37' N.—the most northerly winter quarters ever taken by Christians, except in Spitzbergen, which has the advantage of an insular climate. An observatory was erected, a thermal register kept hourly, and magnetic observations recorded. Parties were sent out to establish provision-depôts to the north, to facilitate researches in the spring. Three depôts or "caches" were made, the most distant being in latitude 79° 12': in this they deposited six hundred and seventy pounds of pemmican and forty of meat-biscuit. These operations were arrested by darkness in November, and the crew prepared to spend one hundred and forty days without the light of the sun. The first number of the Arctic newspaper, "The Ice-Blink," appeared on the 21st. The thermometer fell to 67° below zero. Chloroform froze, and chloric ether became solid. The air had a perceptible pun-gency upon inspiration; all inhaled it guardedly and with compressed lips. The 22d of December brought with it the midnight of the year : the fingers could not be counted a foot from the eyes. Nothing remained to indicate that the Arctic world had a sun. The men, during this their first winter, kept up their spirits wonderfully; but most of the dogs died of diseases of the brain brought on by the depressing influences of the darkness.

The first traces of returning light were observed on the 21st of January, when the southern horizon had a distinct orange tint. Towards the close of February the sun silvered the tall icebergs between the headlands of the bay : his rays reached the deck on the 28th, and perpetual day returned with the month of March. The men found their faces badly mottled by scurvy-spots, and they were nearly all disabled for active work. But six dogs remained out of forty-four. " No language can describe," says Kane, "the chaos at the base of the rock on which the store-house had been built. Fragments of ice had been tossed into every possible confusion, rearing up in fantastic equilibrium, surging in long inclined planes, dipping into dark valleys, and piling in contorted hills." A sledge party was sent out on the 19th to deposit a relief cargo of provisions; on the 31st, three of its members returned swollen, haggard, and almost dumb. They had left four of their number in a tent, disabled and frozen. Dr. Kane at once started with a rescue of nine men, and, after an unbroken march of twentyone hours, came in sight of a small American flag floating upon a hammock. They were received with an explosion of welcome. The return with the sledge laden with the weight of eleven hundred pounds was effected at the expense of tremendous efforts of energy and endurance.

While still nine miles from their half-way tent, they felt the peculiar lethargic sensation of extreme cold—symptoms which Kane compares to the diffused paralysis of the electro-galvanic shock. Bonsall and Morton asked permission to go to sleep, at the same time denying that they were cold. Hans lay down under a drift, and in a few moments was stiff. An immediate halt was necessary. The tent was pitched, but no one had the strength to light a fire. They could neither eat nor drink. The whisky froze at the men's feet. Kane gave orders to them to take four hours' rest and then follow him to the half-way tent, where he would have ready a fire and some thawed permican. He then pushed on with William Godfrey. They were both in a state of stupor, and kept themselves awake by a continual articulation of incoherent words. Kane describes these hours as the most wretched he ever went through. On arriving at the tent, they found that a bear had overturned it, tossing the pemmican into the snow. They crawled into their reindeer sleeping-bags and slept for three hours in a dreamy but intense slumber. On awaking, they melted snow-water and cooked some soup; and on the arrival of the rest of the party they all took the refreshment and pushed on towards the brig. Their strength soon failed them again, and they began to lose their self-control. Kane tried the experiment of a three-minutes' sleep, and, finding that it refreshed him, timed the men in their turns. Doses of brandy, and finally, the distant sight of the brig, revived and encouraged them. The last mile was accomplished by instinct, as none of the men remembered it afterwards : they staggered into the cabin delirious and muttering with agony.

Death now entered the devoted camp : Jefferson Baker died of lock-jaw on the 7th of April. A meeting with a party of Esquimaux now enabled Kane to reinforce his dogteam, and encouraged him to start late in April, upon his grand sledge excursion to the north. It failed, however, completely. Kane became delirious on the 5th of May, and fainted every time he was taken from the tent to the sledge. He was conveyed back to the brig, and from the 14th to the 20th lay hovering between life and death. Short as the expedition was, however, several remarkable discoveries were made. "Tennyson's Monument" was the name given to a solitary column of greenstone, four hundred and eighty feet high, rising from a pedestal two hundred and eighty feet high-both as sharply finished as if they had been cast for the Place Vendôme. But the most wonderful feature was the Great Glazier of Humboldt-an ice-ocean of boundless dimensions, in which a complete substitution had been effected of ice for water. "Imagine," Kane writes, "the centre of the continent of Greenland occupied through nearly its whole extent by a deep unbroken sea of ice that gathers perennial increase from the water-shed of vast snow-covered mountains and all the precipitations of the atmosphere upon its own surface. Imagine this moving onward like a great glacial river, seeking outlets at every fiord and valley, rolling icy cataracts into the Atlantic and Greenland seas, and, having at last reached the northern limit of the land that has borne it up, pouring out a mighty frozen torrent, into unknown Arctic space. . . . Here was a plastic, moving, semi-solid mass, obliterating life, swallowing rocks and islands, and ploughing its way with irresistible march through the crust of an investing sea."

Other sledge-parties were from time to time sent out. One of six men left the brig on the 3d of June, keeping to the north and reaching Humboldt Glacier on the 15th. Four returned to the ship on the 27th, one of them entirely blind. Hans Cristian and William Morton kept on, and finally, in north latitude 81° 22', sighted open water—an open Polar sea. To the cape at which the land terminated Morton gave the name of Cape Constitution. A lofty peak on the opposite side of the channel, but a little farther to the north, and the most remote northern land known upon our globe, was named Mount Edward Parry, from the great pioneer of Arctic travel.

A second winter now stared the explorers in the face. "It is horrible," says Kane, "to look forward to another year of disease and darkness, without fresh food or fuel." Still, preparations were made for the direful extremity. Willow-stems and sorrel were collected as antiscorbutics. Lumps of turf, frozen solid, were quarried with crowbars, and with them the ship's sides were embanked. During the early months a communication was kept up with the nearest Esquimaux station, seventy-five miles distant, and thus scanty supplies of fox, walrus, seal, and bear meat were occasionally obtained. These failed, however, during the months of total darkness. Early in February, Kane wrote in his journal :--- "We are contending at odds with angry forces close around us, without one agent or influence within eighteen hundred miles whose sympathy is on our side." On the 4th of March the last fragment of fresh meat was served, and the whole crew would have perished miserably of starvation, had it not been for the successful issue of a forlorn-hope excursion to the Etah Esquimaux station undertaken by Hans and two dogs. Dr. Kane ate rats, and thereby escaped the scurvy. The bunks were warmed by oil-lamps, after the Esquimaux fashion : the beds and the men's faces became, in consequence, black and greasy with soot. The sufferings endured by the party were perhaps the most dreadful to which Arctic adventurers have ever been subjected.

The abandonment of the brig had been resolved upon before the setting in of winter, and the misery of the hours of darkness had been in some measure alleviated by the progress of the preparations for that event-in making clothing, canvas moccasins, seal-hide boots, and in cutting water-tight shoes from the gutta-percha speaking-tube. Provision-bags were made of sail-cloth rendered impervious by coats of tar. Into these the bread was pressed by beating it to powder with a capstan-bar. Pork-fat and tallow were melted down and poured into other bags to freeze. The three boats-none of them sea-worthy-were strengthened, housed, and mounted on sledges rigged with shoulderbelts to drag by : one of them they expected to burn for fuel on reaching water. The powder and shot, upon which their lives depended, were distributed in canisters : Kane took the percussion-caps into his own possession, as more precious than gold. The 17th of May was fixed upon for the departure.

The farewell to the brig was made with due solemnity. The day was Sunday, and prayers and a chapter of the Bible were read. Kane then stated in an address the necessities under which the ship was abandoned and the dangers that still awaited them. He believed, however, that the thirteen hundred miles of ice and water which lay between them and North Greenland could be traversed with safety for most and hope for all. A brief memorial of the reasons compelling the desertion of the vessel was fastened to a stanchion near the gangway, to serve as their vindication in case they were lost and the brig was ever visited. The flags were hoisted and hauled down again, and the men scrambled off over the ice to the boats, no one thinking of the mockery of cheers.

We have not space to detail the perils, adventures, and narrow escapes from starvation of this hardy party in their romantically dangerous escape to the south. On the 16th of June the boats and sledges approached the open water. "We see its deep-indigo horizon," writes Kane, "and hear its roar against the icy beach. Its scent is in our nostrils and our hearts." The boats, which were split with frost and warped by sunshine, had to be caulked and swelled before they were fit for use. The embarkation was effected on the 19th : the Red Eric, the smallest of the three boats, swamped the first day. They spent their first night in an inlet in the ice. Sometimes they would sail through creeks of water for many successive hours : then would follow days of weary tracking through alternate ice and water. During a violent storm they dragged the boats upon a narrow shelf of ice, and found themselves within a cave which myriads of eider had made their breeding-ground. They remained three days in this crystal retreat, and gathered three thousand eggs. They doubled Cape Dudley Digges on the 11th of June, and spent a week at Providence Halt, luxuriating on a dish composed of birds sweeter and juicier than canvas-backs and a salad made of raw eggs and cochlearia. The coast now trended to the

east ; the wide expanse of Melville Bay lay between them and Upernavik—that Danish outpost of civilisation. They landed at Upernavik the next day in the midst of a crowd of children, and drank coffee that night before hospitable Danish firesides. There Kane and his party embarked on board of a Danish vessel, the captain engaging to drop them at the Shetland Islands. On the 11th September 1855 they arrived at Godhavn, and there, at the very moment of their final departure, Captain Hartstene's relief-squadron was sighted in the offing.

Dr. Kane fell a victim to his zeal in the arduous paths of science on 16th February 1857, sincerely lamented by all.

The Fox screw discovery vessel (Captain M'Clintock), sent to the Arctic regions at the expense of Lady Franklin, in search of information as to the fate of her husband and his companions, returned to England on 20th September 1859. This expedition adds another and concluding chapter to the many brilliant records that adorn our naval annals. Captain M'Clintock brought relics and papers which corroborate the information previously obtained by Dr. Rae. except in the one important point, that our unfortunate countrymen had resorted to cannibalism, in their last desperate efforts to maintain existence. No evidence of this was apparent; on the contrary, chocolate, tea, and tobacco were among the articles recovered. The following particulars of this expedition are abridged from the narration of Captain M'Clintock at a meeting of the Royal Geographical Society on 14th November 1859 :---

"We sailed from Aberdeen 1st of July 1857, and bade adieu to Upernavik, the most northern of the Danish settlements in Greenland, on the 6th of August. My object was to complete the search in the area left unexplored between the expeditions of James Ross, Austin, and Belcher, upon the north; of Collinson and McClure on the west; of Rae and Anderson upon the south; whilst its eastern boundary is formed by the western shores of Boothia. The portion of the earth's surface thus defined comprises an area nearly 300 miles square. Thirty-five dogs and an Esquimaux driver were obtained in Greenland as valuable auxiliaries in our anticipated sledge travel. On the 18th of August, when attempting to pass from Melville Bay to Lancaster Sound, through vast accumulations of drift ice, the ship was seriously obstructed, and finally became beset and frozen up for the winter : then commenced an ice-drift, not exceeded in length by any that I knew of. During the autumn and early spring, about seventy seals were shot in the water spaces, affording a good supply of food for our dogs, and oil for our lamps. It was not until the 25th of April 1858, by which time we had drifted down to lat. 631°, that we were able to escape out of the ice, under circumstances which will long be remembered by all on board. During the 242 days of our imprisonment, the ship's position was astronomically determined, on the average twice a week, and her accumulated drift thus ascertained amounts to 1194 geographical miles. Having once more regained command over the Fox, our voyage was commenced anew. We directed our course to the Greenland settlements in the hope of obtaining supplies of fresh provisions; we met, however, with but little success, though what the Danish residents possessed they readily shared with us. Closely following up every movement of the ice, we succeeded in crossing Melville Bay by 18th of June, and reached Pond's Inlet on 27th of July. Proceeding up Barrow Strait, we reached, on the 11th of August, Beechey Island, the scene of Franklin's first winter, and now the site of a house and store of provisions. Here is a cenotaph bearing inscriptions to the memory of those who perished in the last Government expedition; also a marble tablet to the lamented Bellot. In fitting proximity to these I placed a similar memorial, appropriately inscribed, to the memory of our lost countrymen in the Erebus and Terror. It was sent out for the purpose by desire of Lady Franklin. We then sailed for Bellot Strait, and arrived there on the 20th of August.

Bellot Strait is the water communication between Prince Regent's Inlet and the Western Sea, now known as Franklin Strait; it separates the extreme northern point of the American continent from the extensive land known as North Whilst daylight continued, attempts were made Somerset. to carry out provisions towards the magnetic pole, in order to facilitate the sledging operations of the ensuing spring; but these almost entirely failed in consequence of the disruption of the ice to the southward, and the impossibility of traversing so rugged a country. Lieutenant Hobson, already distinguished by his sledge journeys in the vicinity of Behring's Straits, conducted these operations, and returned on board the Fox with his party in November, after much suffering from severe weather, and imminent peril on one occasion, when the ice upon which they were encamped drifted to seaward with them across Wrotteslev Inlet. A1though vegetation was comparatively abundant, yet the frequent stormy winds which draw through Bellot Strait are probably a sufficient cause for the scarcity of animal life there. Besides our two Esquimaux hunters, Mr. Petersen and several sportsmen were almost constantly on the alert ; yet, during our prolonged stay of more than eleven months, only three reindeer, two bears, eighteen seals, a few waterfowl, and ptarmigan were obtained. Early spring journeys were commenced on the 17th of February of the present year by Captain Young and myself. Captain Young proceeded to carry a depot of provisions across Franklin Strait, whilst I went southward to the magnetic pole, to meet the natives and obtain, if possible, some information that might direct us to the object of our search. I was accompanied by the interpreter, Mr. Petersen, and one seaman ; we took with us two dog-sledges. On the 28th of February, when near Cape Victoria, we met with a small party of natives, who readily built us a large snow hut, and spent the night in it with us. We were subsequently visited by about forty-five individuals, and during the four days we remained amongst them obtained many relics of the lost crews, and

also the information that several years ago a ship was crushed by the ice and sunk off the north-western shore of King William Island, but that all her people landed safely, and went away to a great river, where they died. These Boothian Esquimaux were well supplied with wood and iron, once the property of the white men. With this important information we returned to the Fox, after an absence of twenty-five days of sharp marching, and unusually severe weather, the mercury being occasionally frozen for many hours together. The result of this journey was also important to geography, since it completed the discovery of the coast line of the American continent. Early in April our long-projected spring journeys were commenced. Lieutenant Hobson accompanied me as far as Cape Victoria; each of us had a sledge drawn by four men, and an auxiliary sledge drawn by six dogs, this being all the force we could muster. Before separating we met two Esquimaux families in snow huts upon the ice, as is their custom from October until June, when seals, and perhaps an occasional bear, are their only food. During the summer months they resort to the rivers, lakes, or deer passes, and subsist on fish, venison, and birds. From these people we learned that a second ship had been seen off King William Island, and that she drifted ashore in the fall of the same year. From this wreck they obtained a vast supply of wood and iron.

"According to my original plan of sledge-search, matured during the winter, Lieutenant Hobson was to complete the exploration of the north shore of Victoria Land, between Cape Collinson and Wynniatt's furthest; but in consequence of the information obtained from the Esquimaux, I directed him to search the northern and western shores of King William's Island for the wreck, and to follow any traces he might find. Lieutenant Hobson, therefore, crossed over to Cape Felix, whilst with my own party and the interpreter I marched along the east shore of King William Island, occasionally passing deserted snow huts, but without meeting with Esquimaux until the 8th of May, when near Cape Norton, or as named in some charts, Cape Smith ; here we found a snow village, containing thirty or thirty-five inha-They quickly gathered about us, exhibiting the bitants. utmost delight at our visit, and eagerness to answer Petersen's questions ; but in consequence of their excited state, it was very difficult to understand them clearly. They had not been apprised of our approach, and their independent testimony exactly agreed with that which had previously been obtained. Bartering was commenced immediately, and continued with much spirit on the part of the natives. Ι purchased venison, seal, and salmon, to supply our wants, and all the relics of personal interest, such as silver spoons or forks, which they had. All the wooden articles they possessed, including a large sledge, were made of material obtained from the wreck. Had I had the means of carrying them away, I would have purchased many more things. They pointed to Peel Inlet, and told us that one day's march up it, and from thence four days overland, brought them to the wreck. None of them had been there for more than a year, and then but little remained visible above the ice. Their countrymen had resorted to it for several years past in great numbers, and had carried off all that they could. Some few of these people had seen the white men on their march to the great river, and said that 'many of them dropped by the way,' but that this was not known to them at the time, nor until the following winter, when the bodies were found. Pursuing the native route, we crossed the low land behind it, and met with an Esquimaux family off Point Booth. They also told us that we would find some of their people upon the large island on the Great River, alluding to Montreal Island ; yet none were seen there, nor any recent traces of them. These were the last Esquimaux we met with. Point Ogle, Montreal Island, and Barrow Inlet, were successively searched, but without finding any traces of Europeans, except a few scraps of copper, tin, and iron near an Esquimaux stone-mark. Having now overlapped the ground searched by Messrs. Anderson and Stewart when they descended the Back River in 1855, and having no hope of meeting natives by proceeding further up it, I turned

to the north-west to complete the search to the spot where our countrymen first landed upon King William's Island. Recrossing Dease and Simpson's Strait, we continued the minute examination of the southern shore of King William's Island without success, until near Cape Herschel, the western limit of Simpson's discovery, when a bleached skeleton was found near the beach, around which lay fragments of European clothing. The snow was most carefully removed, and a small pocket-book, containing a seaman's parchment certificate and a few letters, were found. Judging from the remains of his dress, this unfortunate young man had been either a steward or officer's servant, and his position exactly verified the Esquimaux's assertions, that 'they dropped as they walked along.' The skeleton lay at full length upon a level ridge of gravel, just above the beach, in a part which was almost bare of snow ; for walking on, especially if the person was fatigued, it was far preferable to the ice whereon the sledges would of necessity have to travel. Simpson's cairn on Cape Herschel was next day examined ; it had been disturbed, in fact the greater part pulled down, and the impression left upon my mind is, that records were deposited by the retreating crews in this conspicuous and well-known position, but that they were subsequently removed by the Esquimaux. I will now revert to the proceedings of Lieutenant Hobson. After separating from me at Cape Victoria, he made for Cape Felix, the north extremity of King William's Island. At a short distance to the westward of it he came upon unequivocal traces of the Franklin expedition -a large cairn of stones, close beside which were three small tents, with blankets, old clothes, and other débris of a station, probably for magnetic or for shooting purposes; but although the ground beneath the cairn was broken into, and a trench dug all round it at a distance of ten feet, no record was discovered. The most interesting of these relics, including our national flag, were brought away. Two smaller cairns were next found by Lieutenant Hobson as he continued his search ; and on the 6th of May, at Point Victory, the extreme reached by James Ross in 1830, he pitched

his tent beside a large cairn, which he then supposed to be the one built by that officer. Lying amongst some stones, which had evidently fallen off the top of the cairn, was found a small tin case containing a record; in fact, the record of the long-lost expedition. By it we have been informed, that in May 1847, all was well on board the Erebus and Terror; that in the year 1845, the same year in which they left England, they ascended Wellington Channel to lat. 77°, and returned southward by the west of Cornwallis Island, and spent their first winter at Beechey Island. On the 12th of September 1846, they were beset in lat. 70.05°, long. 98.23° W., and here, in the packed ice, about fifteen miles off the N.W. shore of King William's Island, they passed their second winter. Lieutenant Gore and Mr. Des Veaux, with a party of six men, landed and deposited the above record, and another exactly similar, which was found in a small cairn one day's march further south. Round the margin of the former of these documents much additional information was given, under date the 25th of April 1848. The ships, it states, were abandoned on the 22d of April 1848, about fifteen miles to the N.N.W.; therefore they drifted southward only twelve or fourteen miles in twenty months. The survivors, 105 in number, under the command of Captain Crozier, landed at this spot, and built the cairn which now exists upon the site of James Ross's cairn, which must have been taken down by the Esquimaux. Sir John Franklin died on the 11th of June 1847; and the total loss by deaths in the expedition up to the date of their landing, was nine officers and fifteen men. They intended proceeding on the morrow for Back's Fish River, and this record was signed by Crozier as captain of H.M.S. Terror, and senior officer, also by Fitzjames, as captain of H.M.S. Erebus. Even this three days' march seems to have shown them how greatly they had overrated their strength, for here they threw away a vast quantity of clothing and stores of all sorts; in fact, all that was not absolutely indispensable. Lieutenant Hobson continued his search almost to Cape Herschel, without

finding any trace of a wreck or of natives. As he retraced his steps, he left full information of his most important discoveries for me, so that I had the advantage of knowing what had already been found. After leaving Cape Herschel, and proceeding north-westward along the shore, I found the traces of natives become less numerous and less recent ; and after rounding Cape Crozier-the west point of the island ward of Cape Crozier, I came upon a boat twenty-eight feet long, mounted upon a sledge of suitable dimensions. A note left here by Hobson informed me of his having discovered her five days before. It was at once evident that this fine boat had been prepared with the greatest care for the ascent of the Back River. In order to reduce her weight she had been cut down to the thwarts, and very light fir upper-works substituted, supporting a canvas weather-cloth; and she had been fitted with a housing-cloth, that the crew might sleep within her, and thus obviate the necessity for carrying tents. After Hobson's party had dug out the snow which filled this boat, they found a large quantity of clothing and portions of two human skeletons. One of them lay beneath a pile of clothing in the after-part of the boat, and was probably the last survivor. The other lay in the bow, but both had been very much disturbed by wild animals. Two double-barrelled guns stood upright; and loaded as they had been placed, in readiness for use. Watches, silver forks and spoons, small religious books, and articles of all sorts, were found, but neither journals nor pocket-books. Of provisions there remained chocolate and tea, but no biscuit or meat; there was also tobacco, wood-fuel, and ammunition. Now, as this boat was only sixty-five miles from the position of the ships when abandoned, it appeared to be most strange that she should have been deserted so early on the march, the more so as many precious relics, which might very easily have been carried away, remained in her. But, on a close examination, I found that she had been returning towards the ships !

289

"After mature consideration upon all that I have seen, I am of opinion that the abandonment of the Erebus and Terror had been contemplated for months previously to its execution; also, that the whole crew had become affected by scurvy, and greatly debilitated. We know that Franklin's ships were cut off from all supplies of game for three consecutive winters, and that this is the only case on record of ships' crews subsisting solely upon their own supplies for so long a period. The Investigator was abandoned after the third winter, but her crew had been able to procure some valuable fresh food, game of different sorts, including about a hundred reindeer. She lost only three men, yet the whole crew were affected by scurvy. But the Erebus and Terror, before being abandoned, had lost twenty-four men, and therefore I conclude that the remainder of their crews were at least as seriously affected as were the people of the Investigator. There are two important questions which have been so frequently put to me, that I gladly take this opportunity to offer some explanation upon so deeply interesting a subject. The first question is, Whether some of the 105 survivors may not be living among the Esquimaux? The various families, or communities, of Esquimaux met with by Rae, Anderson, and myself, at different times and places, all agree in saying, 'No; they all died.' But let us examine for ourselves. The western shore of King William's Island, along which they were compelled to travel for two-thirds of their route, is uninhabited ; and all that is known to us of the mouth of the Back River, is derived from the journeys of Back, Simpson, Anderson, and myself; none of us have met natives there, consequently it is fair to conclude that the Esquimaux but seldom resort to so inhospitable a locality. Even much more favoured shores in this vicinity are but very thinly sprinkled with inhabitants, and their whole time is occupied in providing a scanty subsistence for themselves. In fact, their life is spent in a struggle for existence, and depends mainly upon their skill in taking seals during the winter, a matter which requires such long

training, that no European has ever yet succeeded in acquiring it. My two Greenland Esquimaux tried various methods at Bellot Strait, yet did not succeed ; and without dogs trained to scent out the small breathing-holes of seals through the ice, and through the snow which overlays the ice, I do not think even the Boothian Esquimaux could live. It requires not only that a man should possess a trained dog, but that he himself should be well trained in the only successful mode of seal-hunting, in order to subsist in this locality. It is, therefore, evidently an error to suppose that, where an Esquimaux can live, a civilized man can live also. Esquimaux habits are so entirely different from those of all other people, that I believe there is no instance on record of either a white man or an Indian becoming domesticated amongst them, or acquiring tolerable expertness in the management of a kayak. With regard to the probability of procuring the means of subsistence independently of the Esquimaux, I will just state what was shot by my own sledge party-and we never lost a chance of shooting anything-during the journey along the lands in question, that occupied us for seventy-nine days, and covered nearly 1000 geographical miles of distance. The sum total amounted to two reindeer, one hare, seventeen willow-grouse, and three gulls. The second question is, Why have the remains of so few of our lost countrymen been found ? It is. indeed, true that only three of the 105 were discovered; but we must bear in mind, that from the time they left the ship they were dragging sledges and boats, and therefore they must have travelled almost constantly upon the ice, not upon the land; consequently all traces or remains there vanished with the summer thaw of 1848. There is no doubt that many relics still remained strewed along the uninhabited shore of King William's Island, beneath the snow ; but as it was most carefully examined three times over, I cannot think that any conspicuous object, such as would be put up to indicate where records were deposited, could possibly have escaped us."

CONCLUSION.

Having brought to a conclusion the history of "THE SEA AND HER FAMOUS SAILORS," in which we have shown what the ocean once was in man's estimation, and the steps by which it has taken its place in the world's economy, let us very briefly refer to what the ocean now is, and what place it now holds. It is the peaceful highway of nations-a highway without tax or toll. If the distances be considered, the sea is the safest and most commodious route from spot to spot, whether for merchandise or Like the lightning and the thunderbolt, it has submitted man. to the yoke. Though still sublime in its immensity and its power, it has lost most of those features of character which once made it mysterious and fantastic, and has become the everyday pathway of traffic. Mail routes are as distinctly marked upon its surface as the equator or the meridian of Greenwich ; steamships leave their docks punctually at the stroke of noon. The monsters that plough its waters have been hunted by man till the race is wellnigh exhausted; for the leviathan which frightened the ancients is the whale which has illuminated the moderns.

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