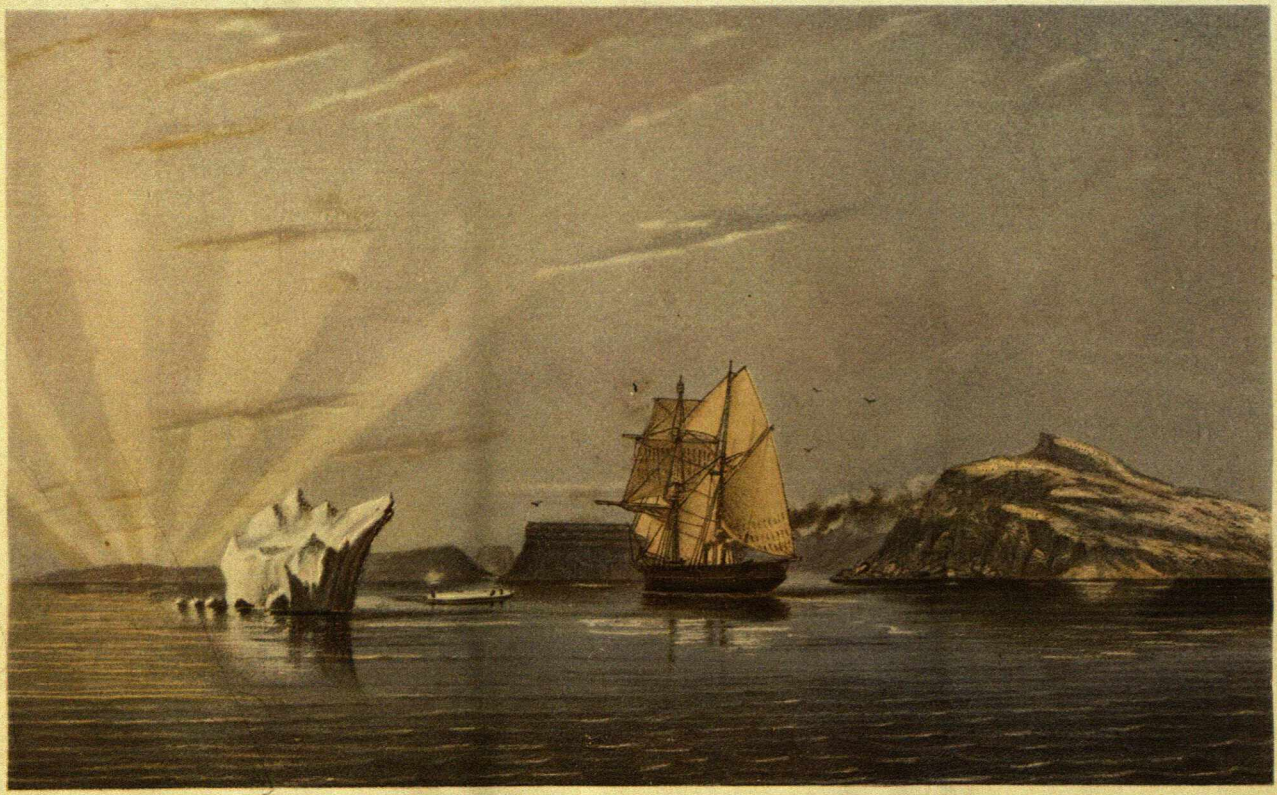
A HISTORY OF EXPLORATION

"One of the thinges most naturally desired of noble hartes is to heere reade of comon or straunge contries, and espetiallie of contreis that we have had no knoweledge of, being farre aparted from us, and of there commoditees, behaviour and customes w^ch are very straunge to owres."

BARLOW, *A Brief Summe of Geographie.*

"For as Geography without History seemeth a carkasse without motion, so History without Geography wandreth as a Vagrant without a certaine habitation."

JOHN SMITH, *Generall Historie of Virginia.*



"ISABEL" ENTERING THE POLAR SEA THROUGH SMITH SOUND, MIDNIGHT AUGUST 26TH, 1852.

From a drawing by Commander E. A. Inglefield, 1852

[*front*.

A HISTORY OF EXPLORATION

FROM THE EARLIEST TIMES TO THE PRESENT DAY

By

BRIGADIER-GENERAL

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Dedicated to

THE ROYAL GEOGRAPHICAL SOCIETY

IN GRATEFUL APPRECIATION OF ITS ENCOURAGEMENT

OF MY HUMBLE EFFORTS IN THE FIELD

OF EXPLORATION

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PREFACE

EXPLORATION and travel have constituted the chief interests of my life and I count myself fortunate to have been able to wander far and wide. I have also listened to many great explorers, beginning with Sir Samuel Baker, when a boy of ten; and some of them I can reckon among my friends.

In this work, which is written for the general reader, I have made no attempt to include every explorer or every journey. This would be impossible with the limited number of words at my disposal; indeed the overflowing abundance of material has constituted a serious difficulty. My plan has been to set the stage when necessary and, as far as possible, to allow the chief actors to speak for themselves. I have touched lightly on the better-known countries and have devoted the greater part of my space to the more remote lands of the world.

I have received much help from my friends. Lieutenant-Colonel Kenneth Mason, Professor of Geography at Oxford, has read through practically the whole of my proofs, while I am also deeply indebted to Mr. E. Heawood and Mr. G. R. Crone, of the Royal Geographical Society, in whose library this work was mainly written. Chapters dealing with subjects on which they are leading experts have been read by Sir Percy Cox, Sir William Gowers, Dr. Hugh Mill, Colonel C. H. D. Ryder, Colonel T. E. Lawrence, Mr. J. H. Wordie, Dr. T. G. Longstaff and Mr. John Baddeley. This valuable assistance I would gratefully acknowledge. I am deeply indebted to Mr. J. N. L. Baker's standard work and for the permission of Messrs. George Harrap & Co., to use his excellent sketch maps, which incidentally show the routes of various travellers whom I have been unable to mention. I would also thank my two daughters who have industriously typed the chapters, and the many corrections and additions.

Apart from acknowledgements made in the text, I would thank Messrs. Jonathan Cape for permission to quote from *Arabia Felix*, and the proprietors of the Argonaut Press for permission to quote from their *Varthema* and *Cabot*. Messrs.

Thornton Butterworth have granted me similar permission for *The Lost Oases*, and Messrs. Constable & Co. for Mr. Philby's works. Finally, I would express my thanks for any other quotations that I may have made from other works.

The number of books consulted has been great, but, instead of a bibliography, I have given the chief works in footnotes as they were consulted by me. I have, as a rule, referred to explorers by their surnames only in the text but, in the index, their initials are shown. Thirty-six maps illustrating the journeys of explorers have been provided, but I also take it for granted that my readers use their atlas.

In conclusion, for nearly two years I have been enjoying the company of the great explorers, past and present, and if this epitome of their heroic achievements affords my readers one tithe of the pleasure that I have experienced in writing it, I shall deem myself richly rewarded.

A HISTORY OF EXPLORATION

CHAPTER I

EARLY EXPLORATIONS

"He stretcheth out the north over the empty place, and hangeth the earth upon nothing."

Job xxvi. 7.

EXPLORATION in the widest sense of the word was undoubtedly undertaken all over the world by its primitive inhabitants. They depended for their food partly on berries and roots, but more especially on hunting, and must have travelled far and wide in search of the game on which, in the colder regions at any rate, they depended not only for food but also for their pelts; in the coastal regions they relied on shell-fish and fishing. After such early "food gathering" came agriculture, which was probably "invented" in the valleys of the Euphrates and Nile. The early agriculturists lived a partly pastoral life, as they still do in countries where grazing is scanty owing to insufficient rainfall. Persia is a typical case in point, where nomad tribes, like the Kashgais, move in the spring 200 miles from the warm districts near the Persian Gulf to the bracing uplands of Fars, and a similar distance in the autumn back to their winter pastures. The army of Cyrus the Great consisted chiefly of the shepherds of Fars, Media, and Elam.

On reaching historical times, inscriptions tell us mainly of the wars that were waged and the temples that were founded. Yet here and there we find mention of exploration. In the legend of Gilgamesh, one of the earliest old-world stories of Sumer, we read how the hero set out with a companion to attack the King of Elam, who had invaded Sumer. "Hearing that their enemy was concealed in a sacred grove, they pressed on, and stopped in rapture before the cedar-trees; they contemplated the height of them, they contemplated the thickness of them." It is clear that the writer of the legend was a dweller in the plains of Iraq, which, save for the date groves, are treeless, and had travelled to the mountains of Elam, where the magnificent trees especially struck him.

The earliest campaigns of Sumer were with these mountaineers of Elam, but Sargon, the founder of the dynasty of Akkad, conquered Elam and many districts to the north, as well as Syria to the west, while Naram-Sin conquered Lulubi, a country in the neighbourhood of the modern Kermanshah, this conquest being recorded in the famous stele of Naram-Sin.

Trade was active from very early days, even in the fourth millennium B.C. As Leonard Woolley [1] points out, the wealth of Sumer was purely agricultural, and its imports included copper from Oman, silver from Elam, limestone from the Upper Euphrates Valley, and diorite from Magan in the Persian Gulf; lapis-lazuli was imported from distant Badakshan. All these raw materials were paid for by the exquisite goldsmiths' work, the sumptuous tissues and other manufactures that were sought throughout the Near East. About the time of the First Dynasty, we find in Egypt stone maceheads, cylinder seals and other objects which prove conclusively the existence of trade connections between the Euphrates and the Nile valleys. Nor is this all. Recent excavations at Mohenjo-daro have brought to light a very early civilization akin to that of Sumer. Not only are its seals similar in form, subjects and style, but a likeness is also traceable in terra-cotta figures. Indeed, it is evident that these two civilizations have a common source, which is probably to be found in Persia. A variety of objects discovered in the Indus Valley, Elam, and Iraq, prove the existence of considerable intercourse at the close of the fourth millennium B.C., the period when Mohenjo-daro was at its zenith.

Sumer and Akkad were succeeded by the first empire of Babylon, which reached its zenith under Hammurabi, the famous lawgiver. He was possibly the Amraphel of Genesis xiv., who raided Palestine with the Kings of Elam, of Larsa, and of the Hittites, carrying off Lot, who, according to the account, was rescued by his uncle Abraham.

But Assyria, throughout her existence, was the most warlike of the old Powers, and conquered provinces in every direction. About 1100 B.C. Tiglath-Pileser marched to the source of the Tigris, where an inscription still standing describes the campaign. Eastwards he invaded Media, a list being given of the places he captured, while to the west he defeated the Hittites and reached the Mediterranean, embarking at Arvad for a cruise on the sea. Sargon II in the eighth century

[1] *The Sumerians*, by C. Leonard Woolley, p. 45 *et seq.*

annexed the country of the Hittites, captured Samaria, and led Israel captive to the plains of Iraq and to distant Media. His successor Sennacherib gives a detailed account of a naval expedition that was despatched against certain Chaldaeans who had taken refuge in the coast-lands of Elam. The Assyrian monarch describes how his fleet was constructed on the upper reaches of the Tigris and Euphrates, the ships built on the former river being dragged on rollers from Opis to the Euphrates. From the port of Bab-salimeti [1] near its mouth the fleet sailed to the Ulai or Karun River, where the surprise of the Chaldaeans was complete. Their settlements were destroyed, and the expedition returned in triumph to its base. It is to be noted that at this period the three rivers reached the Persian Gulf independently, the land having advanced well over a hundred miles since the date of Sennacherib's expedition, which unquestionably added to Assyrian geographical knowledge.

Esarhaddon, who succeeded his father, conquered Egypt. He also penetrated into Media as far as Mount Demavand, which he considered to be the boundary of the world. Assyria reached the zenith of her power under this monarch, while in 645 B.C. Assurbanipal captured and sacked Susa, and Elam as a kingdom disappeared. Not long after, Cyaxares of Media and Nabopolassar of Babylon captured Nineveh, and Assyria disappeared in its turn to make way for the empires of Media and Persia.

Throughout this long period of some 2,000 years we have no definite information as to intercourse with China, but Grousset [2] proves clearly, if only by his illustrations, that, at the dawn of history, a common civilization existed extending from Egypt to the Hwang-Ho or "Yellow River" and the Indus, the ideals, processes, and subjects of its art being of a decidedly similar nature. We are therefore justified in concluding that the horizon and the commerce of the peoples gradually extended, while we realize from the exchange of letters and gifts between the rulers of these ancient monarchies that they were well informed regarding the politics and trade-routes of the Near and Middle East.

We next come to what may be termed the Aegean area, which is remarkably favourable for navigation. The earliest maritime empire was that of Crete, founded about 2800 B.C., and known as the Minoan, after its great historical dynasty,

[1] This name is almost identical in form with modern Arabic and signifies "The Gate of Safety".

[2] *The Civilization of the East*, by Réné Grousset, 1932, Vol. I, p. 25.

which, in later ages, became legendary in Greece. Throughout its long existence, Crete was closely connected with Egypt, and the two empires waxed and waned together down the centuries. At Cnossus, I have seen what was undoubtedly the throne of Minos.

Owing to the fact that the many Cretan tablets that have been found cannot be read, our knowledge of the Keftui and their history is mainly obtained from Egyptian annals. We know that they were a sea-faring people, who established their influence over the neighbouring islands, whence it spread to the mainland of Greece, Mycenae finally taking the place of Crete. Ships figure on their seals. They were single-masted, with high sterns, and were propelled by oars. The splendid palaces of Cnossos and the luxury of their occupants prove the extent and importance of their sea-borne commerce, which undoubtedly extended to Sicily and Southern Italy. We also read of a contract made by Thotmes III with these seafarers for the transport of timber from Lebanon to Egypt in 1467 B.C.

The Minoan Empire fell about 1450 B.C., and it is generally believed that it was the Achaeans who overthrew the sea-power of Crete, and established the hegemony of Mycenae.

Their successors were the Phoenicians of Byblus, Arvad, Tyre, and Sidon, who developed a remarkable aptitude for seafaring, and, beginning at about 1200 B.C., founded trading stations at many points in the Mediterranean and even farther afield, where they sold their fine linens, their dyed woollen goods and their glass wares. Carthage, their chief colony, was founded about 840 B.C. Their fleets traded in the Red Sea, and opened up commercial relations with India. In this connection Ezekiel, who was a priest of the Temple at Jerusalem, wrote a most interesting account of the trade relations of Tyre early in the sixth century B.C. Beginning with timber for the ships and oars from Senir (Mount Hermon), Lebanon, and Bashan, he refers to the fine linen with embroidered work from Egypt for the sails; while blue and purple work were imported from the isles of Elishah in the Aegean Sea. He continues: "The inhabitants of Sidon and Arvad were thy mariners, thy wise men were thy pilots." The Prophet then deals with the caulkers, and mentions that the Persians, the Lydians, and the men of Phut (Libya) were the fighting men. Returning to commercial matters, Tarshish (probably a port in India) traded in silver, iron, tin and lead; Javan (the Ionian Greeks), Tubal (the Balkans) and Meshech (the port of Dhufar or Ophir) dealt in slaves and brasswork. The house of

Togarmah (Armenia) brought horses and horsemen and mules. Syria traded in emeralds, purple, and broidered work, fine linen, coral, and agate. Damascus dealt in Tyrian manufactures, while Dan and Javan imported bright iron, cassia and calamus. Arabia supplied sheep and goats, while the merchants of Sheba (Yemen) and Raamah in Hadramaut dealt in various spices, in every description of jewellery, and in gold. Finally Haran in Iraq, Canneh in Chaldaea, and Eden (the modern Aden), as well as the merchants of Sheba, Assur and Chilmad in Media, are mentioned. Altogether we have a most valuable, even detailed, account of the commercial relations of Tyre with the surrounding countries. It is, however, to be noted that the Phoenicians—whose chief exports were timber and purple dye—never produced either jewellery or pottery of an artistic nature, and this was probably one reason for the success of their Greek rivals. Like the Venetians, they were chiefly carriers, and not manufacturers.

There is a story told by Herodotus that Necho, King of Egypt about 600 B.C., sent out an expedition manned by Phoenicians, who sailed round Africa from east to west, keeping the sun on their right hand, and returned safely to Egypt by way of the Pillars of Hercules, after taking three years over the voyage. It is in this connection that the Atlantic Ocean is so named for the first time by Herodotus. It might be thought that such an exploit was beyond the range of possibility in those early days. But is this so certain? Many years ago, when I first visited Maskat, I was amazed to learn that a branch of the ruling family reigned as Sultans of Zanzibar, which is distant some 2,000 miles. On making inquiries it appeared that the regular north-east wind that blows during the winter and the steady south-west monsoon of the summer furnished the explanation. It also helps to solve our present problem.

The ships of the Phoenicians were craft of much the same kind as the modern Arab *baggala*, and their seamen were experienced navigators who were also skilled shipwrights, while the question of supplies would be managed by sowing a crop and waiting for it to ripen. Consequently it is not improbable that this great feat was actually accomplished.

However this may be, Carthage despatched an expedition at about this period with the object of founding colonies on the west coast of Africa. Indeed, Carthage displayed amazing energy in the foundation of trading posts, which stretched westwards to the straits of Gibraltar and down the African

coast. The scale on which she worked is proved by a statement that 30,000 men and women were sent to found the posts in Western Morocco. Again, we hear of exploration northwards along the coast of Spain, and expeditions were undoubtedly despatched to bring back tin from the "Tin Islands", though apparently no posts were founded there.

Generally speaking, the Phoenicians, unlike the Greeks and Etruscans, did not colonize in the sense of settling down to till the land with trade as a secondary consideration. For the Phoenicians, commerce came first throughout, and where they held land it was almost entirely cultivated by slaves. Not that they did not build fine cities on the coast of Africa, in the west of Sicily and on the island of Sardinia. In Africa, apart from sea-borne commerce, they were deeply interested in the caravans that traded across the Sahara to the Middle Niger. The eastern route to Lake Chad ran directly south from the Greek colonies of Cyrene and Barca, and consequently lay outside their sphere. Finally, in Spain, where Gades (Cadiz) was a very old settlement, they were able to prevent Greek adventurers from penetrating into the Atlantic, or indeed from settling elsewhere in Spain.

Another powerful race of seafarers were the Tyrrhenians, brothers of the Lydians, who settled on the Italian coast, mainly between the Tiber and the Arno, and were known to the Romans as "Tuscans" or "Etruscans". They reached Italy possibly in the ninth century B.C., and by the sixth century had formed a league of twelve leading communities which represented the strongest power in Italy, but waned after the Latins and Sabines of Rome expelled their Etruscan masters in 510 B.C. These Tyrrhenian pirates, as they were generally called, were friendly to the Carthaginians, and hindered Greek activities by every means in their power.

No introduction to Greek sea-voyages would be complete without mention of the *Odyssey* of Homer. In this chapter reference has already been made to the rise of Mycenae, the capital of an Achaean confederacy which ruled the South Aegean. Her rival was Troy, situated on the Dardanelles, which had arisen on the ruins of the Hittite Empire and was supported by a powerful confederation of tribes. Homer's immortal theme was the siege of Troy by the Achaean league about 1200 B.C., an undertaking which, until the spade of the archaeologist set matters right, was considered to be entirely legendary. So far as concerns the geographical side of

the poems of Homer, a correct knowledge of the Aegean area is shown, as we should expect, but when Odysseus on his journey home from the Trojan War visits Egypt and tells of the lotus-eaters, or is almost killed by the Cyclops of Sicily, or again when he just escapes from Scylla albeit with the loss of six heroes, and eludes Charybdis, he gives rein to the delightful genius which has enthralled mankind down the ages.

> "Now through the rocks, appall'd with deep dismay,
> We bend our course, and stem the desperate way;
> Dire Scylla there a scene of horror forms,
> And here Charybdis fills the deep with storms;
> When the tide rushes from her rumbling caves,
> The rough rock roars, tumultuous boil the waves."

The wily Odysseus stands out as the type of the hardy mariners of the Mediterranean, who defeated Persia at the battle of Salamis, and I suffered bitter disappointment on being informed during a passage through the Straits of Messina that an earthquake had caused historical Scylla to disappear beneath the waves.

The Greeks came later into the field, and were vigorously opposed by the Phoenicians, who sank all foreign ships in the Western Mediterranean at sight, as well as by the Tyrrhenians. However, as time went by, Greek colonies were planted on the east and south coasts of Sicily, while Carthage occupied its western and northern coasts, and also Sardinia.

The products of Greece, which were more valued than those of Carthage, helped to support Greek commercial ventures, and in spite of Carthaginian hostility, Greek adventurers successfully founded Massilia (Marseilles) in the Western Mediterranean and Cyrene in Northern Africa, both of which colonies flourished. In the Black Sea the Greeks had settled from early times, choosing sites for their cities at the points where trade routes ended and at the mouths of rivers.

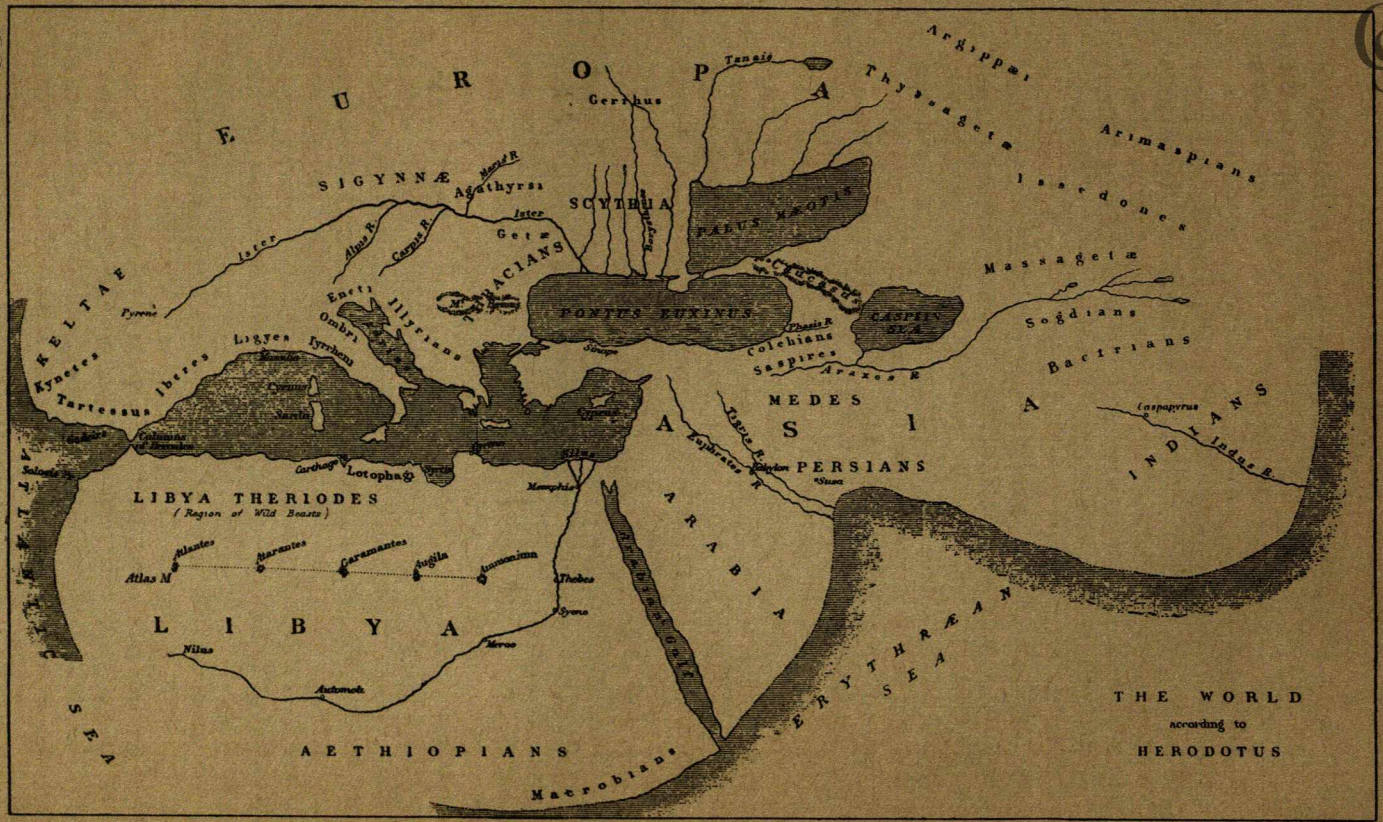
To Anaximander of Miletus, who lived in the sixth century B.C., we owe the first map of the world. He regarded it as a section of a cylinder of considerable thickness, suspended in the heavens, just as Job describes it in the motto to this chapter. The Aegean Sea formed the centre of this circular disc, with a vast ocean flowing round it. Hecataeus, who lived more than a generation later, displayed an intimate knowledge of the lands bordering on the Mediterranean Sea as far west as Sardinia, and was generally acquainted with the

provinces of the Persian Empire. He had also travelled in Egypt, which he was the first to describe as " the gift of the Nile ". His book, entitled *Periodos*, is the earliest known work on geography.

Hecataeus lived during the reign of Darius, the great organizer of the Persian Empire. Realizing the importance of communications, Darius had constructed the Royal Road, running from Sardis to Susa, through the heart of Asia Minor, crossing the Euphrates at Samosata and the Tigris at Nineveh, and so to the winter capital of the Great King, a distance of more than 1,500 miles. This was considered a three months' journey for a man on foot, but, with relays of horses at each stage, it could be traversed by couriers in about a fortnight. As might be supposed, the construction of this road widened the horizon of the provinces through which it ran, and generally opened up Persia to the Hellenic world and especially to the Ionian Greeks.

Herodotus, the Father of History who flourished in the fifth century B.C., was an explorer and an eminent geographer. He travelled far and wide in the Black Sea, Greece, and Magna Graecia. He visited Tyre and Gaza, and spent a long time in Egypt. He also travelled along the Royal Road to Susa and Babylon. As a result of his extensive voyages and studies, Herodotus realized that the theory of the world as a circular disc was untenable, and he divided the lands which enclose the Mediterranean Sea into the continents of Europe, Asia and Africa. Europe he takes as bounded by the Atlantic on the west, but as stretching indefinitely across Northern Asia. He possesses but little knowledge of Central and Northern Europe, and shows Pyrene —presumably an echo of the Pyrenees—as a town, while similar echoes of the Alps and Carpathians appear as tributaries of the Ister or Danube, which he considered to be the chief river of Europe. In Asia his knowledge extends to the India of the Indus Valley, and thanks to Scylax, whose expedition is described in the next chapter, he knows of the Erythrean Sea.

In Africa he has heard of Meroe, the capital of Ethiopia, but the Nile is shown as corresponding with the Danube, owing to the Greek passion for symmetry. Although he has heard of stages in the caravan route to the west, and lays down the outline of the northern coast of Africa, his knowledge of the interior of that continent is as vague as in the case of Northern Europe. Yet he mentions a story which



THE WORLD ACCORDING TO HERODOTUS.

(From E. H. Bunbury's "History of Ancient Geography", by permission of Messrs. John Murray & Co., Ltd.)

had reached him from the Siwah Oasis of a great river far away to the south-west, swarming with crocodiles, which is obviously the Niger, but which he took to be the upper reaches of the Nile.

Such, then, was the position of exploration in the fifth century B.C.

CHAPTER II

THE EXPEDITION OF ALEXANDER THE GREAT

> "His city there thou seest, and Bactra there;
> Ecbatana her structure vast there shows,
> And Hecatompylos her hundred gates;
> There Susa by Choaspes, amber stream,
> The drink of none but Kings."
>
> MILTON, "*Paradise Regained*".

ALEXANDER THE GREAT, both in his character and his achievements, represents the culminating point of Greek civilization.[1] He had the good fortune to be educated by Aristotle, who, among his other claims to immortality, was the first scientific geographer, and proved that the earth was a sphere by the circular shadow thrown on the moon during an eclipse, and by the shifting of the horizon as one travelled from north to south and lost familiar stars, while new stars rose into view. Alexander, the greatest conqueror of all time, was also a great explorer, and thanks to the record that was kept of his campaigns, he initiated an epoch of geographical discovery.

But before we follow him across Asia to the Jaxartes (Syr Darya), it is interesting to examine the position of Greek knowledge of Asia at this period.

We may begin our survey by a reference to the campaigns of Darius, who in 512 B.C. annexed large districts of the Punjab and of Sind. The Great King took advantage of the situation to despatch Scylax of Caryanda with a flotilla to explore the Indus. Scylax not only reached the Indian Ocean, but apparently sighted the coast of Oman and the Persian Gulf, and his account of this voyage was undoubtedly read by Alexander.

A century later, in 401 B.C., Cyrus the Younger marched from Sardis with a considerable force of Greek mercenaries to fight his elder brother Artaxerxes for the throne of Persia. Thanks to the admirable account given by Xenophon, we can follow the adventurous expedition across Phrygia and Mysia to the famous Cilician Gates in the Taurus, which they traversed unopposed and descended into Cilicia.

[1] This chapter is mainly based on Sykes, *History of Persia* (3rd ed.), Chaps. XXI–XXIV.

Cyrus now experienced considerable difficulty in persuading his Greek troops to advance, but the promise of an increase of pay overcame their objections, and he marched swiftly through the Gates of Syria opposite Cyprus and reached the Euphrates at Thapsacus. Once more there was no opposition, and, fording the Euphrates, the army proceeded rapidly southwards, hoping to meet the Great King before he was fully prepared. Suddenly, during the fourth stage, a scout informed Cyrus that the huge Persian army was on its way to attack him. The battle of Cunaxa ended in a victory for the Greeks, who broke and pursued the Persian left wing, but Cyrus, charging at the head of his cavalry, was struck in the eye by a javelin and killed.

The situation was entirely changed by the death of Cyrus, and the victorious Greeks finally agreed to return to Hellas up the valley of the Tigris. In spite of the treacherous seizure of their chief officers, the immortal "Ten Thousand" under the leadership of Xenophon shook off the half-hearted attacks of the Persians, and marched steadily north, marvelling by the way at the half-ruined cities of Assyria. The Persians left them when they entered the uplands, where they were harassed by the attacks of the Carduchi, the ancestors of the virile Kurds. But the Greeks were past-masters in hill tactics, and marched on undaunted, obtaining supplies at times with difficulty but yet never losing heart. They passed to the west of Lake Van and across the main range of Asia Minor, suffering from bitter cold, until one happy day, having climbed a pass from which the Euxine was visible, they arrived at Trapezus, the modern Trebizond, after accomplishing a magnificent feat of exploration, which is worthily described by their great leader. At Trebizond I was shown the pass where the Greeks shouted "*Thalassa! Thalassa!*", as well as the site of their camp outside the city, which is still called *Campos*. Some, at any rate, of the older Macedonians must have met veterans of the Ten Thousand, and there is no doubt that the proved superiority of the Greeks over the myriads of Persians on the plain of Cunaxa must have encouraged Alexander and his soldiers to aim at the lordship of Asia.

Alexander started on his famous campaign in the spring of 334 B.C. His father, Philip of Macedon, had trained the heavy cavalry whose charge won every battle, and the irresistible phalanx. He had also conquered and annexed Thrace as far as the Dardanelles, and a Macedonian garrison held

Abydos on the Asiatic side, to which city the army was safely transported.

Alexander then marched north to attack a powerful Persian force which was drawn up on the right bank of the Granicus. The infantry portion of the Persian army consisted of 20,000 Greek mercenaries, who were most unwisely kept in reserve. The Persian cavalry offered a desperate resistance, but their short javelins were no match at close quarters for the lances of the Macedonians, and they were finally defeated, after which the Greek mercenaries were cut to pieces. The prize of this victory was Lydia with Sardis. Alexander immediately reorganized its administration, thus showing that he intended his conquest to be permanent. He gradually annexed the various provinces of Asia Minor, meeting with a stubborn resistance from the chief Greek cities on the coast. The Greeks, indeed, were the backbone of the opposition that was offered throughout, and the death of Memnon, who was organizing an invasion of Macedonia on behalf of the Great King, must have been a source of intense relief to the Macedonians.

Alexander marched across Phrygia to Gordion, where he cut the knot of the waggon of Gordius, thereby fulfilling the oracle which promised to whoever should perform this feat, the lordship of Asia. After arranging for the administration of the various provinces included in Asia Minor, he made a forced march to the Cicilian Gates, which he passed without any opposition, and occupied Tarsus. He then went on to the Syrian Gates, expecting to meet Darius Codomannus in the open plains to the east of the "Gates". But to his amazement he heard that the huge Persian army had crossed a pass to the north, and was actually encamped in his rear at Issus. Alexander marched back and, in the battle that ensued, his charge drove the craven Darius in headlong flight, Issus being the decisive battle of the campaign.

After Issus, the next objective of the Macedonians was the capture of the ports of Phoenicia, the bases of the Persian fleet. Tyre, relying on its immense strength, defied Alexander, but was finally captured, while the squadrons belonging to Sidon and other cities deserted from the Persians and made terms with the conqueror. After Tyre, Gaza was captured, and Alexander then marched across the desert to Egypt, where he treated priests and people with the utmost consideration. In Egypt he founded Alexandria, which rapidly became a great port. Impelled by the strain of mysticism in his blood, he also crossed the desert to the mysterious temple of Amen-

Ra, known to the Greeks as Zeus Ammon, situated in the remote Siwah oasis. There the priests assured him that he was the true son of the god. He is consequently portrayed with horns in his portraits, and obtained as a result in later years the title of *Zulkarnain* or "Lord of the two Horns", by which name he is still remembered throughout the Moslem East. During this expedition he received envoys who offered the submission of Cyrene. We are lost in admiration at the exploits of this great conqueror, who in so short a time had laid low the might of Persia and annexed so many of her richest provinces.

Alexander organized his march into the heart of the Persian Empire from Tyre, where he met his fleet and reinforcements. Finding that the country beyond the Euphrates was held only by a small force of Persian cavalry, he had ordered the construction of two bridges of boats, which were ready, and the army crossed the river without delay. No opposition was offered in the vast open plains of Iraq, where, some three centuries later, Crassus met his fate at the hands of Parthian mounted archers. Again, at the swift Tigris, crossed with considerable difficulty, no engagement took place, and Alexander marched down its left bank to find Darius awaiting him at Gaugamela, near the ruins of Nineveh, situated some seventy miles north-west of Arbela, which latter town has given its name to the battle. The battle of Issus had been the decisive encounter, and at Arbela the *coup de grâce* was administered. Darius again played the craven, and was thenceforth practically a refugee. The victor marched on Babylon, where, like Cyrus the Great, he was welcomed, and "took the hands of Bel". The Babylonians, who had been severely treated by the later Persian monarchs, served Alexander loyally.

From Babylon Alexander advanced on Susa, which the Greeks regarded as the capital of the Great King, and here treasure of inestimable value was seized.

Alexander then determined to invade Pars (now Fars) the homeland of the dynasty and the classical Persis. Crossing the Karun at the modern Ahwaz, he entered the mountains, where the Uxii, who were accustomed to take toll of the Great King, demanded the like from Alexander. He bade them come to the defiles to receive it, and following a hill-track, fell on their rear and held them at his mercy. Marching swiftly, he again repeated the Persian tactics of Thermopylae, and having cut to pieces the defenders of the "Persian Gates",

ALEXANDER THE GREAT AS "LORD OF THE TWO HORNS"
(Through the courtesy of the Hellenic Society)

[*face p.* 14

seized Persepolis, the Great King's spring capital, where he was accustomed to receive the tribute of his subjects on March 21, the Persian New Year, as the bas-reliefs show. Here again incredible wealth was seized, for it was the custom of each Achaemenian monarch to add to the gold reserve of his ancestors; and the favourable effect of the dispersal of this treasure on commerce was extraordinary.

Alexander was now in possession of Babylon, Susa, Persepolis and of Pasargadae, the capital of Cyrus the Great, a stage to the north. Darius had fled from Arbela direct to Ecbatana, the ancient capital of Media. Alexander spent some four months at Persepolis, and then prepared to start in pursuit of the fugitive. At Pasargadae he visited the tomb of Cyrus the Great and gave orders for it to be carefully preserved, and, hearing that Darius was organizing a new army, made a forced march on Ecbatana. Darius fled before his arrival, and as Ecbatana was situated on the main line of communication from his main base at Tyre, Alexander decided to make it his advanced base. He accordingly garrisoned it with 6,000 troops, in whose charge he left his enormous treasure.

Darius had fled towards Bactria, and was moving slowly, apparently not expecting to be pursued. Alexander took a picked body of men and made forced marches to Ragae, the Rhages of the book of Tobit, the ruins of which lie a few miles south of Teheran. But Darius had already passed through the Caspian Gates, a long march east of Ragae. Accordingly the conqueror rested his men for a few days, and then continued the pursuit. He was now following the caravan route which runs east to Khorasan and Central Asia, and he finally overtook the hapless Darius, who had been assassinated by Bessus, the Satrap of Bactria, in the vicinity of modern Damghan, which later became Hecatompylos, the capital of Parthia, mentioned by Milton.

With the death of Darius all national resistance ceased, and in his future campaigns Alexander was faced with only local opposition, albeit stubborn resistance was offered in Central Asia and in India.

Under the new conditions Alexander decided to conquer and annex the provinces as he passed. To the south of his route was the great desert of Persia, whereas to the north lay fertile Hyrcania. Crossing the main range, which runs from Mount Ararat to loftier Demavand, and so eastward across Northern Afghanistan, he received the submission of the leading men of the province at Zadracarta, which occupied

a site near modern Astrabad. He then followed up the Gurgan Valley. When exploring in that neighbourhood some years ago, I heard a legend to the effect that Alexander grazed his horses in the meadow of Kalposh. I visited this meadow, and found that it undoubtedly lay on his route, and that from it he entered the valley of the Kashaf Rud near Susia, the medieval Tus. Here he heard that Bessus had assumed the title of Great King, and he decided to pursue him. Traversing Areia, now the Herat province of Afghanistan, he restored it to its Satrap, Satibarzanes, who had submitted. He was well on his way to Bactria (now Badakshan) when he heard that Satibarzanes had rebelled and had killed the Macedonian representative and his escort. Nothing daunted, Alexander made a long forced march back to Artacoana, the capital of Areia, and the rebellion collapsed. Alexander now decided to attack Barsaentes, Satrap of Drangiana, which includes modern Sistan, probably in order to protect his long and vulnerable lines of communication. No resistance was offered, Barsaentes, who had been one of the murderers of Darius, fleeing to join Bessus.

To the south lay the Lut desert, and Alexander accordingly struck the Etymander and marched north-east, intending once again to take up the pursuit of Bessus. Marching through Arachosia and then up the Argandab River, he founded another Alexandria, the Kandahar of to-day. Thence he turned almost due north, along what has been a caravan route from time immemorial, to Kabul, the modern capital of Afghanistan. Two thousand years later another European force, under Lord Roberts, was to march in the opposite direction to relieve Kandahar. Alexander was now close to India, which he undoubtedly meant to conquer, little realizing its enormous extension to the south. Accordingly he decided to found another Alexandria *ad Caucasum* at a point where the three passes over the Indian Caucasus or Paropanisus met. He then crossed the range, suffering from bitter cold and lack of supplies, and descended into Bactria, where Bactra, the medieval Balkh, known as the "Mother of Cities", was occupied without a contest. Bactra was the last of the great cities of the Persian Empire to fall to the Macedonians.

Alexander crossed the Oxus on rafts, and after receiving the surrender of Bessus, who was betrayed by his own officers, marched north to Maracanda, now Samarkand. After resting his troops at the future capital of Tamerlane, he beat the boundaries of the Persian Empire by advancing to the Jaxartes

or Syr Darya, where he founded Alexandria Eschate or "the Extreme", on the site of modern Khojand—a city situated some 3,500 miles east of Hellas. What that signified before the era of modern communications can hardly be grasped by the European of the twentieth century. Yet the Macedonians considered the Jaxartes to be the same river as the Don!

Alexander suffered his only disaster during the course of his campaign in Sogdiana, where the virile chiefs fought bravely to expel the invaders. Stronghold after stronghold was captured, and among the prisoners was Roxana, whom Alexander married. In no part of Asia is the fame of Iskandar *Zulkarnain* so high, even the chiefs of distant Hunza claiming descent from the great conqueror.

Nearly two years had been spent in Central Asia fighting and exploring, and at last Alexander was free to invade India, the attraction of which was irresistible. He had entered into relations with various chiefs, which resulted in the submission of King Taxiles, whose capital has recently been excavated in the vicinity of Rawal Pindi. Alexander ordered the main body to march by the main route to the north of the Khyber Pass, while he undertook a campaign in the Swat Valley, culminating in the capture of Aornos, which Sir Aurel Stein has recently discovered in a bend of the Indus.[1] Crossing the Indus, Alexander was opposed by Porus on the banks of the Hydaspes, now the Jhelum, where his tactics excite profound admiration. He gained a complete victory and captured Porus, whom he reinstated on his throne. He crossed the rivers of the Punjab, and when halting on the right bank of the Beas, began to prepare for a march into the Ganges valley. But his way-worn veterans mutinied, and Alexander consented to march back down the Indus to Persia.

Constructing ships on the Jhelum, the force started off on a march nearly 1,000 miles in length, which included the conquest of various tribes and strong places, one of which, identified with Multan, offered a stubborn resistance and nearly cost Alexander his life.

Sailing on the Indian Ocean, Alexander despatched Nearchus with orders to coast westwards to Persia. He himself, realizing that the fleet might suffer from starvation, resolved to march across the entire length of Gedrosia, now Makran, hoping thereby to keep in touch with Nearchus and victual the fleet. For perhaps 100 miles this arrangement worked fairly well, but at this stage Ras[2] Malan forced the

[1] *On Alexander's Track to the Indus*, 1929.

[2] *Ras* signifies a headland.

troops to turn inland, and, to quote Arrian, "the blazing heat and want of water destroyed a great part of the army . . . tortured alike by raging heat and unquenchable thirst".

Alexander regained the coast near Pasni, where fresh water can be obtained by digging wells on the sea-shore. He followed the coast to Gwadur, whence, although very anxious about the fleet, he marched inland to Pura, now termed by the Baluchis Pahra and by the Persians Fahraj, and situated in one of the few fertile valleys of Persian Baluchistan. Here Alexander regained touch with his Persian officials, and his worn-out troops, whose losses had been very severe, were rested and refitted.

The question of the route followed in the onward march was settled by me in 1894. Rejecting the previous opinion, which made Alexander march to another town named Fahraj to the north-west, I explored a westerly route which followed down the river of Pura to a large *hamun* or inland lake, termed the Jaz Morian, into which it discharged. Continuing westwards up the Halil Rud, which also discharged into the Jaz Morian, Alexander made a standing camp in the modern district of Rudbar. One of my greatest treasures is an alabaster unguent vase dug up in this valley which may well have belonged to Alexander. It was at this standing camp, where an Alexandria was founded which may be identified with the modern Gulashkird, that Nearchus appeared in rags. Alexander feared the total loss of his fleet, but the intrepid Admiral reported that it was safely drawn up at Harmozia, on the Anamis, now the Minab River.

Nearchus deserves immense credit for his successful conduct of this voyage. Not only did he suffer from the hostility of the natives, but both supplies and sweet water were hard to procure. As they still do to-day, the "Ichthyophagi", who lived on fish, as their name implies, inhabited a desert where not a tree grew, and where there were not even wild fruits. Yet in spite of these anxieties, Nearchus kept a careful log of the distances traversed, and gave the harbours their local names, which have changed very little. To give but one instance, Hormuz was the medieval form of Harmozia.

Craterus, who had been sent in charge of the elephants and baggage, rejoined the army after a march down the Helmand in Rudbar, so wonderfully did Alexander's plans work out.

The march to Susa was then resumed, Nearchus rejoining the fleet, with Hephaestion marching along the coast in touch with it. Alexander traversed the districts of Sirjan and Baonat

to Pasargadae, where we read of his distress upon finding that the tomb of Cyrus had been desecrated. At Susa the greatest of all exploring expeditions ended in rejoicings and in weddings between the noblest Macedonians and Persian women of high degree. Shortly afterwards Alexander, while preparing an expedition for the exploration and conquest of Arabia, died at the early age of thirty-two in the plenitude of his splendid powers.

We have seen what valuable additions Alexander made to Greek knowledge of Asia, and it is interesting to reflect on his conception of the world. He had no idea of the enormous size of the Indian peninsula, nor of the existence of the Malay peninsula, nor indeed of the huge area of China. He still believed that the world was very much smaller, even as regards the continent of Asia, than it actually is, and that the Ganges flowed into the Ocean to the east, which washed the northern coasts of Scythia and of which the Caspian formed a bay. Had he lived another decade, the position would have been very different. Of his successors, Seleucus Nicator gained considerable information about the Ganges valley from Megasthenes, whom he despatched on an embassy to the Maurya monarch at Patali-putra (Patna), where he lived for many years, and wrote an account of his experiences, in which the earliest reference is made to the monsoon. Moreover, under the patronage of Ptolemy Euergetes, Erastosthenes, who laid the foundations of mathematical geography, gave the world the first approximate knowledge of the size of the globe. Euergetes also despatched expeditions which explored parts of Arabia.

To conclude this chapter, we may mention that the earliest Greek explorer beyond the Mediterranean was Pytheas of Massilia (Marseilles), who in 330 B.C. determined to visit the countries which produced tin and amber. Coasting Iberia and the Bay of Biscay, the island of Uxisama (Ushant) was reached. He then sailed up the English Channel to Cantion (Kent), where he resided for a considerable period and visited the tin mines of Cornwall. Later, he followed up the east coast of Britain to the north of Scotland, where he heard of a distant land called Thule. As if this adventure were not enough, in a second voyage he apparently sailed the Baltic, visiting the coasts where amber was found, and finally returned to Massilia in safety. Pytheas took five observations of the lengths of the longest days, by which he fixed his latitudes. His works are unfortunately lost, but he ranks among the greatest of the ancient explorers.

CHAPTER III

EXPLORERS OF THE CHINESE EMPIRE

> "The Tien Shan mountain of ice forms the northern angle of Pamir. It is most dangerous, and its summit rises to the skies. From the beginning of the world the snow has accumulated on it, and has turned into blocks of ice, which melt neither in springtime nor in summer. They roll away in boundless sheets of hard, gleaming white, losing themselves in the clouds."
>
> HSUAN-TSANG.

THE civilization of China does not compare in antiquity with those of Sumer and Egypt. Yet we have good reason to believe the evidence of ancient records, according to which the Chinese had emerged from the pastoral stage in the third millennium B.C., and were tilling the soil in the valley of the Hwang-ho. In the second millennium the Chou dynasty was founded, and one of its members, about 1000 B.C. made a royal progress to a province of the empire which may perhaps be identified with Khotan.

The great teacher Confucius flourished in the sixth century B.C., and was a contemporary of Cyrus the Great. At this period China was far advanced intellectually, but, owing to her feudal system she was split up into a number of weak states, and was unable to withstand the raids of barbarian tribes from the north, or to end the constant civil wars. As elsewhere in early times, the contest lay between the "desert and the sown".

In the third century B.C. the unification of China was accomplished by the founder of the Chin dynasty, who constructed the Great Wall, which, contrary to general belief, afforded considerable protection to China and diverted the migrations of the tribes westwards, with all its consequences for the Middle East and for Europe. To give an example of these movements, in the second century B.C. the Hsiung-nu, better known as the Huns, attacked and drove out the Yue-chi, an Iranian tribe which inhabited the Kansu province and the southern part of the Gobi,[1] thereby setting in motion a series of human avalanches. The Yue-chi crossed the Gobi

[1] *Gobi* signifies *desert*, and is particularly applied to the great waste which separates China from Khotan or Hami.

to Kucha, and in their turn drove the Sakae from Kashgar in 163 B.C. and settled in their place, while the Sakae occupied Bactria, driving its Greek dynasty across the Hindu Kush. But, some twenty years later, the Huns again attacked the Yue-chi, who once more driving the Sakae in front of them, occupied Bactria. They then crossed the Hindu Kush and carved out an empire with Purushapura or Peshawar as their capital.

About 30 B.C. the Kwei Shang became the leading tribe of the Yue-chi. Antony sent ambassadors to this people, called by the Romans Kushan, and their envoys appeared before Augustus. Incidentally the peach and the pear were introduced into Persia from China through the agency of the Yue-chi, and reached Europe from Persia, the latter fruit proclaiming this fact by its name.

It is generally agreed that until 140 B.C. China had no knowledge of the West, but under the Emperor Wu-ti of the Han dynasty, who came to the throne in that year, missions were despatched in every direction. Wu-ti was most anxious to induce the Yue-chi to attack the Huns, his most dreaded enemies, and being ignorant of the fact of their second flight, in 138 he despatched Chang Kien, the earliest known Chinese traveller, to win them over to his wishes. The ambassador had hardly left China when he was captured by the Huns, whose prisoner he remained for ten years, after which he escaped and succeeded in reaching the state of Farghana. There he was well received, and reported that its inhabitants had heard of the power and wealth of China.

Chang Kien finally reached the Yue-chi, who had recently conquered Tokharistan and were occupying its capital. As was to be expected, the envoy was unsuccessful in his efforts to persuade the Yue-chi to return to their eastern possessions and engage the Huns. In 128 B.C., Chang Kien attempted to return to China *via* Tibet, only to be captured again by the ubiquitous Huns. Finally, in 126 B.C., this indomitable explorer reached China in safety, and was able to furnish the Emperor with much valuable information.

Eleven years later, Chang Kien was despatched on another embassy to the West, and gained much fresh information, besides sending agents to Farghana. It was probably from this journey that he brought back the vine to China, where, curiously enough, little wine is made. His reports resulted in the opening of the famous Silk Route which ran across the Gobi to Khotan, Yarkand and Farghana, with a northern

alternative route *via* Hami and Kashgar. To make the former route safe, a chain of fortified posts was constructed across the Gobi, which were examined by Stein and yielded a rich harvest in 1907. The Huns were defeated, what is now Chinese Turkestan was occupied, and in 102 B.C. a Chinese army reached the distant province of Farghana, a fact which testifies to its efficiency as a fighting force. A southern route was also opened which crossed the mountains to India, and followed down the course of the Ganges.

Under the Han monarchy, more than one embassy penetrated as far as Parthia, which is named An-Sih, the Chinese form of Arsaces, the name of the royal dynasty. The ambassadors reported that An-Sih was a great country, producing rice, wheat and wine. Reference is made to silver coins bearing the effigy of the reigning monarch, while " they make signs on leather from side to side by way of literary record ". No mention is made of the Roman Empire by this embassy, which took place about 120 B.C. It is of especial interest to note that the reigning monarch of Parthia, Mithridates II, who received the embassy from China, was likewise the first Parthian monarch to open up relations with Rome. A century or more later Chinese envoys were again despatched to the West, and from their reports we learn that the eastern part of the Roman Empire now came within the ken of China.

Among the most famous conquerors and administrators of the Han dynasty was Pan Chao, who is credited with the conquest of fifteen kingdoms to the west of Kashgar. This period perhaps shows us the empire of China at its greatest extent, stretching from the Pacific Ocean to the Sea of Aral, and according to Chinese belief, to the Caspian Sea.

In A.D. 97 Pan Chao despatched his lieutenant Kan Ying on a mission to Parthia and Rome. This worthy duly reached Iraq, visiting Hecatompylos, the capital, on his way. In pursuance of his instructions he tried to reach Syria by the Persian Gulf, but, being informed that the voyage might take two years, he prudently decided not to make the attempt. At this period the route ran down the Persian Gulf and up the Red Sea and the Gulf of Akaba to Aelana, a matter perhaps of months, but the ships' captains evidently had every intention of preventing a Chinaman from gaining direct contact with the Roman Empire. Pan Chao died a few years later, and his memory is kept green at Kashgar, where he is buried in an artificial mound surmounted by a shrine.[1] As one result

[1] Vide *Through Deserts and Oases of Central Asia*, by Ella Sykes and Sir Percy Sykes, p. 67.

of these embassies, China equipped a mounted force on the model of the heavy Parthian cavalry, while the arts of both countries were mutually affected.

Chinese ambassadors again appeared in Persia, now called Po-sz, in the middle of the fifth century A.D., and the Persian monarch sent a return embassy with a gift of trained elephants. The Chinese account runs as follows:

> "Po-sz has its capital at Suh-li (Ctesiphon) . . . with over a hundred thousand households. The land produces gold, silver, coral, amber, very fine pearls and glass; crystals, diamonds, iron, copper, cinnabar, mercury; damask, embroidery, cotton, carpeting and tapestry. . . . The climate is very hot, and families keep ice in their houses. . . . They produce white elephants, lions and great birds' eggs; there is a bird shaped like a camel,[1] having two wings which enable it to fly along but not to rise. It eats grass and flesh, and can also swallow fire."

An account is given of the king sitting on a golden throne supported by lions, with his magnificent crown, and even the titles of the chief Court officers are mentioned.

For China the silk trade was of the utmost importance, and for many centuries it was a monopoly, Roman ladies being obliged to purchase the luxury for its weight in gold. Virgil believed that silk was produced from the leaves of trees; Pliny knew no better, nor did Ammianus, who wrote in the fourth century. But, as Yule points out,[2] there was a fluctuation of knowledge among the ancients, as in the case of the belief of Strabo that the Caspian formed a bay of the encircling ocean, whereas Herodotus knew that it was a small sea. Similarly, by Pausanias, who lived before Ammianus, silk was declared to be spun by worms which the Seres tended for the purpose.

China maintained her rich monopoly until, in the middle of the sixth century, Justinian commissioned two Persian missionaries, who had long resided in China, to bring him some of the precious "seed" concealed in a bamboo staff. This task, one of the great romances of commerce, was successfully accomplished, and on it was founded the important silk industry of Europe.

To turn to Chinese intercourse with India, Buddhism was introduced into China by the agency of the Yue-chi about the time of the Christian era, and the first expedition of which we have any account was despatched by the Emperor in A.D. 65 to obtain instruction in the doctrines of Buddha and to

[1] Curiously enough Persians term the ostrich the "camel bird".
[2] *Cathay and the Way Thither*, Vol. I, p. 21.

bring back statues and manuscripts. This was but one of many such expeditions, and Indian monarchs, in their turn, sent missions to China. The policy of the Emperors who reigned for some two centuries from A.D. 220 interrupted this intercourse, but we hear of Fa-hsien who set off on a successful journey to India early in the fifth century, and there made an important collection of the Books of the Discipline.

Among the greatest explorers of the world was Hsuan-tsang and, by way of setting the stage for his appearance, I propose to give a brief account of the position in China at the time of his great journeys.[1]

Just as Europe, after the fall of the Roman Empire, was overwhelmed by waves of barbarian invaders, so China, on the overthrow of the Han dynasty, was afflicted by invasions of Turko-Mongol hordes during the fourth and fifth centuries. At the beginning of the fifth century, the Kings of Wei conquered the rival hordes, and adopting Chinese civilization, ruled over Northern China for nearly a century and a half. In 453 the Emperor was converted to Buddhism, which thus became the state religion.

Once again a period of anarchy ensued, which was ended by the rise of a great warrior, who ascended the throne in 626 as the Emperor Tai-tsung and founded the Tang dynasty. Under his virile leadership the Turks of Mongolia were crushed, Turkestan was conquered, and the suzerainty of China was recognized throughout Central Asia, and westwards as far as the Caspian Sea, thus restoring the ancient boundaries of the Chinese Empire.

At this point Hsuan-tsang appears on the scene. A fervent Buddhist, descended from a long line of *literati*, he realized after much study the existence of serious discrepancies in the sacred books, and determined to "travel in the countries of the West, in order to question the wise men on the points that were troubling his mind". Hsuan and several other monks petitioned the Emperor for permission to leave China, but it was refused. However, in 629, fortified by a dream, Hsuan set out to cross the dreaded Gobi from Liang-chou, situated near the Great Wall.

Deserted by his companions and his guide, the Master of the Law, to give him the title by which he is best known, rode calmly into the desert. Finding the track by the bones of camels and their droppings, he suddenly saw the horizon

[1] *In the Footsteps of the Buddha*, by Réné Grousset; also "The Desert Crossing of Hsuan-Tsang," in *G. J.*, Vol. LIV, p. 205, by Sir Aurel Stein.

Map of EURASIA about 650 A.D.

Hsüan's Itinerary

I-Ching's ..

covered with marching troops. "On one side were camels and richly caparisoned horses; on the other, gleaming lances and shining standards." This was of course a mirage. By a most remarkable coincidence, a Hindu merchant, who had certainly never heard of Hsuan-tsang, once described to me an identical vision of an army seen by him in the Takla Makan desert.[1]

Apart from the dangers of the Gobi, there was serious risk to be run in passing the forts that guarded the frontier. At the first the traveller was nearly wounded by arrows when drinking at the spring of water, but, entering the fort, he persuaded the officer by his eloquence to forward him on his journey. This he did, supplying him with provisions and introductions to officers at some of the other posts, but bidding him avoid the fifth and last watch-tower. To observe this strict injunction, Hsuan was obliged to leave the caravan route, and, "in order to find his way, endeavoured to observe as he walked the direction of his shadow". He not only lost his way, but dropped the skin of water given to him at the fourth post, and thus became a prey to thirst. For four nights and five days he had no water, but fortunately his horse scented a pool, and Hsuan, safe but exhausted, reached Hami, where he was welcomed by three Chinese monks.

The King of Turfan, at that time one of the most important states of Central Asia, received the Master of the Law with the highest honours and formed the design of retaining him permanently to grace his court. Indeed, only on threatening to starve himself to death, and actually beginning to do so, was he permitted to continue his journey. The ruler of Turfan was subordinate to the Great Khan of the Western Turks, and he not only furnished Hsuan with an escort, but also sent valuable presents to his suzerain to ensure his good-will.

Hsuan continued his journey through Kucha, and passing to the north of Kashgar, reached the camp of the Great Khan of the Western Turks early in 630, after crossing the ice-bound Tien Shan. He describes the cavalry of the Turks as being mounted on numerous horses, "carrying long lances, banners, and straight bows. Their ranks stretched so far that the eye could not follow them." The Master of the Law was treated with the greatest respect by the Great Khan, and arrangements were made for his onward journey to Gandhara.

From the camp of the Turks, Hsuan proceeded to Shash,

[1] *Through Deserts and Oases of Central Asia*, p. 197.

the capital (now Tashkent), and, crossing the Qizil Qum desert, he reached Samarkand, the Maracanda of Alexander, where the culture and religion were alike Iranian. Passing through the land which gave birth to mighty Tamerlane, and the "Gates of Iron", Hsuan crossed the Oxus at Tirmiz and entered historical Bactria, which was ruled over by a son of the Great Khan. This Prince, who was a pious Buddhist, sent the traveller on to Balkh, destined later to be destroyed by the Mongols. From Balkh the Master crossed the Hindu Kush to Bamiyan, which could boast of ten Buddhist monasteries. To quote Hsuan's excellent description: "Bamiyan clings to the mountain-side and crosses the valley. . . . On the north side it leans against the rock." He visited the monastic cells cut out of the cliff, and mentions the two gigantic statues of Buddha which are still in existence.

From Bamiyan the Master swung due east, and entered fertile Kapisa, a district watered by the Panjshir, where he was welcomed by the King, who was also a devout Buddhist. After spending the summer of 630 in this upland resort, the Master descended to the plains of India, passing through a country which had become an important centre of Buddhism, with many relics of the Buddha. Among the great stupas Hsuan mentions one as measuring 300 feet, which was built by Asoka.

From the district of Nagarahara, Hsuan passed down the grim Khyber Pass to Gandhara, one of the most famous districts in India, which, under its modern name of Peshawar, is still the key to the chief land-gate of the North-West Frontier. As Grousset points out, it was in this district that the first statue of the Buddha had been chiselled by a Greek sculptor; and the Master was taken to see the stupa erected by the great Kanishka. But a century previously the Huns had devastated a wide area in Central Asia, and Hsuan bitterly lamented their acts of vandalism. From Gandhara, Hsuan travelled up the Swat Valley and traversed the gorges of the Indus, which no European has yet seen.[1] "The roads were very dangerous", he wrote, "and the valleys gloomy. Sometimes one had to cross on rope bridges, sometimes by clinging to chains. Now there were gangways hanging in mid-air, now flying bridges flung across precipices."

In Swat, even more than in Gandhara, the Huns had ruined

[1] Sir Aurel Stein, bent on the discovery of the Aornos of Alexander the Great, referred to in the previous chapter, was also able to identify many of the sites mentioned by his "Chinese patron-saint" in the Swat Valley. See *On Alexander's Track to the Indus, passim.*

the Buddhist monasteries for which Udyana or "the Garden" was famous in distant China. Hsuan was not pleased with the monks of this valley, "who like reading this doctrine (of ecstasy), but do not seek to penetrate its meaning".

Leaving the Swat Valley and following in Alexander's footsteps, Hsuan crossed the Indus and reached Taxila, where he found many monasteries, "but they are very dilapidated". He next visited Kashmir, which he aptly describes as "a country with a circumference of 700 leagues, and its four frontiers have a background of mountains of a prodigious height. It is reached by very narrow passes." In this beautiful country Hsuan, to his great delight, found a teacher in a venerable monk aged seventy, who "was gifted with a profound intellect and his vast learning embraced every branch of knowledge".

Two fruitful years, from 631 to 633, were spent in completing his philosophical training, after which the Master descended to the plains of India and travelled to the valley of the sacred Ganges, where at every centre he found doctors of the Law and great libraries full of the sacred books.

Hsuan travelled far and wide in the plains of India. Near the modern Allahabad he was captured by pirates, who prepared to sacrifice him to Durga. The Master, quite unmoved, asked for a short respite to permit him "to enter nirvana in a calm and joyous mind". At this juncture a terrific storm arose, breaking trees, and raising waves which sank the boats. The pirates, attributing the fury of the elements and the loss of their boats to the power of Hsuan, fell at his feet and repented.

Benares, which had already become the sacred city of the Hindus, interested the Master, who was especially struck by a colossal statue of Siva "full of grandeur and awe". Another site of great historical interest which he visited was Patali-putra (Patna), where the first Maurya emperor, "Sandrocottus", had received Megasthenes, the ambassador of Seleucus Nicator. From this city, too, Asoka had governed his immense empire. As Grousset writes: "It was the real Holy Land of Buddhism."

Leaving Bodh-Gaya, where Buddha had attained enlightenment, Hsuan visited Nalanda, the great monastic city. There he found another saintly master, under whom he studied the philosophy of Idealism for over a year. Continuing his wonderful journey, Hsuan took the road to Bengal, "a low damp country where grain grows abundantly", which he

crossed to the port of Tamralipti. Thence, giving up the idea of a sea voyage, he decided to travel across the Deccan to Ceylon. He spent the year 640 in Dravida, the home of the Dravidians, but, hearing reports of civil war and famine in Ceylon, he reluctantly decided to renounce his visit to the sacred island.

He had travelled southwards along the east coast of the Gulf of Bengal, and he returned by the west coast. He now met and gave a good description of the warlike Mahrattas, of whose king he writes: "He has warlike tastes and puts the glory of arms before everything." Moving northwards Hsuan reached the peninsula of Gujerat, whose merchants traded with Persia, and he mentions that "the Persians can weave brocaded silk stuffs, and various kinds of carpets". He also comments favourably on the Persian horses and camels.

Before starting on his long return journey, Hsuan accepted an invitation to visit Assam, of which he tells us that "the towns are surrounded by rivers, lakes and ponds. The bread-tree and the coco-nut flourish there." He ascertained that the frontiers of the Chinese province of Ssu-chuan were a two months' journey away, through forests infested by wild elephants. Accordingly he decided to visit Harsha, the Poet King of Northern India, and to return to China by Central Asia. Accompanying the King of Assam, he travelled up the Ganges with 20,000 elephants and 30,000 boats to Harsha's camp, where he was received with extraordinary honours. An assembly was convoked at Kanauj, at which Hsuan presided with much distinction, but his eloquence provoked the hatred of his opponents, who plotted to take his life, while Harsha was attacked by an assassin. It is interesting to note that Harsha had recently received an embassy from Tai-tsung, which proves the existence of diplomatic relations between India and China at this period.

In 643, the Master of the Law bade farewell to Harsha, who loaded him with gifts and sent an escort to protect him as far as the frontier. He traversed the Punjab without incident, but in crossing the Indus had the misfortune to lose fifty manuscripts and his collection of flower-seeds. Everywhere he was received with almost royal honours, and, bidding farewell to the King of Kapisa, the fearless Master decided to follow up the Oxus to the Pamirs and to visit Kashgar. In July 644, the Hindu Kush was crossed with much difficulty, and Hsuan traversed Tokharistan and Badak-

shan, where he spent a month with the Governor, who was a relation of the Khan of the Western Turks.

Provided with an escort, the Master reached Po-mi-lo, or the Pamirs, which he was the first traveller to describe.

> "The valley of Pamir is about a thousand *li*[1] from east to west, and a hundred *li* from south to north. It is situated between two snowy mountains. The cold is glacial, and the wind furious. Snow falls even in spring and summer, day and night the wind rages. Grain and fruit cannot grow there, and trees are few and far between. In the middle of the valley is a large lake, situated in the centre of the world on a plateau of prodigious height."

Descending from the Pamirs, while travelling through the gorge of the Tangitar, the Master was attacked by a band of robbers, and several of his elephants fell into the ravines and were killed. The travellers, however, reached Kashgar with their precious relics, manuscripts and statues unharmed.

Hsuan comments on the general desert nature of the country, but notes that in the oasis grain and fruit abounded. He also remarks that the eyes of the Kashgaris have green pupils, thereby, as Grousset remarks, proving their East Iranian strain.

From Kashgar the Master travelled to Yarkand and Kargalik, crossing a bay of the Takla Makan desert. Following the caravan route, Yutien or Khotan, the "Kingdom of Jade", where Stein began his epoch-making archaeological researches, was reached. Here again the Master found an important Buddhist centre, boasting of one hundred monasteries. He arrived at Khotan in the autumn of 644, and spent several months awaiting the Emperor's permission to return to China. He then continued his long journey to Lop-nor and again waited at Tun-huang, which yielded such important documents, frescoes and paintings on silk banners to Stein and Pelliot. Finally, in 645, the obscure monk who had quitted his country against the orders of the Emperor was, upon his return, granted a magnificent official reception, and, with due solemnity, handed over to the Monastery of Great Happiness the relics, statues and manuscripts which he had collected with such loving care, and at the cost of infinite toil and risk.

How often, when following in the footsteps of the Master in the Pamirs or on the road to Khotan, have I referred to Hsuan-tsang, while during the night marches in the desert the universal feeling might be epitomized by Hsuan's

[1] Normally there are three *li* to a mile.

description: "The view was boundless, there were no traces of man or horse, and in the night the demons and goblins raised fire-lights as many as the stars; in the day-time the wind blew the sand before it."

Hsuan-tsang, in short, was undoubtedly the greatest known traveller that the world had so far seen. One is always impressed by the accuracy and fairness of his distinctly critical mind, which seems to be almost that of a twentieth-century European. He was more highly educated, representing as he did a famous civilization at its zenith, than Marco Polo, and naturally understood the mentality and point of view of Asiatics infinitely better than the great Venetian. Moreover, the fact that for many years after his return he lived in close touch with the Emperor, his description of the countries he had visited and of the rulers he had met, must have been of considerable value to China. His services to the Buddhist religion, which, as Grousset writes, "had created a vast current of humanism, from Ceylon to the farthest isles of the Japanese archipelago", were priceless.

Hitherto we have dealt with explorers by land, but, to complete the picture, a brief account will be given of the voyage of the monk I-Ching. In the autumn of 671 this intrepid explorer embarked on his voyage to India in a Persian ship, and wrote, "Long were we held over the immense abyss; great waves, high as mountains, lay across the sea, over the whole of the vasty deep the waters rose, like clouds, to the heaven."

I-Ching duly reached Sumatra, where he remained for eight months, and was able to study Buddhism in its flourishing monasteries. He continued his voyage in a Sumatra ship, and, crossing the Bay of Bengal, coasted the Nicobar Islands, "the land of naked men". He describes how these savages brought coco-nuts and bananas to exchange for iron, and added that "if one refuses to barter with them, they immediately shoot with poisoned arrows". In 673, I-Ching landed at the port of Tamralipti, where he studied Sanskrit for a year before penetrating into India. He then visited the sacred places and went back to Sumatra with more than 10,000 rolls of Sanskrit texts, which he set to work to translate. He finally returned to China, where he was granted the honour of a public reception, and he spent the rest of his life in completing his great literary work. He also wrote an interesting account of the eminent Chinese monks "who went to seek the Law in the countries of the West".

The Chinese took a special interest in Ceylon, where the relic of relics, the tooth of Buddha, was carefully guarded. Indeed, it was the general belief that, if it were lost, the island would be swallowed up by demons. One of the earliest Chinese pilgrims to land in the sacred island attempted to steal it, but he was caught. Embassies were also exchanged with the court of China up to, and later than, the visit of Marco Polo to Ceylon.

The connection of China by sea with the West was primarily due to the courage and enterprise of the Arab seamen. We learn from Chinese sources that, in A.D. 166, "Antun (Marcus Aurelius Antoninus), King of Ta-tsin, sent an envoy by the parts beyond Jihan (Indo-China) with offerings of ivory, rhinoceros-horn and tortoise-shell". This, if we may judge by the gifts, was no envoy, but probably a Roman merchant who hoped for better treatment by assuming the status of an ambassador. The earliest dated reference to the sea voyages of Chinese vessels is to be found in the pages of Masudi, who mentions that in the first half of the fifth century of our era ships from India and China were constantly to be seen in the Euphrates at Hira. Chinese annals of the seventh and eighth centuries describe the course taken by the junks from Canton to the Euphrates. From Ceylon they made for Malabar, and crossing the Gulf of Cambay they reached Diu. Mention is made of the great river Sinteu (the Indus), and, following unconsciously in the wake of Nearchus, in twenty days they reached the Straits of Hormuz, where it is interesting to learn that there was a great lighthouse, and so to Siraf and the Euphrates.

The Arabs established a factory at Canton in the seventh century A.D., or possibly earlier, and we are told that in 758 the Persians and Arabs were strong enough to burn and sack the city and then flee to their ships. But a century later we read that the foreigners resident at the Chinese ports were counted by thousands. In Chapter V an account is given of the relations between China and the Caliphate.

A most interesting branch of exploration was that conducted by the missionaries of the Nestorian church. According to the traditions of the Christian Church in India it was founded by St. Thomas the Apostle, and an anthem in the Chaldaean breviary of the Malabar church runs :

> "The Hindus and the Chinese and the Persians, and all the people of the Isles of the Sea, and they who dwell in Syria and Armenia, in Java and Romania, call Thomas to remembrance. . . ."

After the condemnation and banishment of Nestorius in 431, his sect spread extensively in Persia and much further afield, Metropolitan sees being constituted at Herat, Samarkand, and in China during the seventh and eighth centuries. In the middle of the ninth century, we learn that the metropolitans of China, India, Persia, Merv, Syria, Arabia, Herat and Samarkand were excused from attending the quadrennial synods of the church on account of the remoteness of their sees.

The earliest reference to the Christian religion in China is an edict issued by the Tang Emperor in 745 in which it was declared that the religion of the sacred books known as Persian had originally come from the Ta-tsin and that its temples had become known as Persian temples. The edict enacted that these temples should in future be known as Ta-tsin temples.

The celebrated monument of Si-ngan-fu erected in the seventh century gives an abstract of Christian doctrine, with an account of the arrival of the missionary Olopun from Ta-tsin in 635, and of the decree of the Emperor commanding the construction of a church. In this church the monument was erected in 781.

The story of these Nestorian missionaries will be taken up again in Chapter VIII, but there is no question that there was communication, even if of an intermittent nature, between their sees throughout these centuries, and that the missionaries followed the trade routes.

Among the religions of the East which have profoundly influenced mankind was that founded by Manes. Born in A.D. 215, he proclaimed his mission at the coronation of Shapur I, the captor of Valerian, and for some years his influence was great at the Persian court. Later, falling from favour, he travelled to India, Tibet and China, from which latter country he brought back pictures which played a considerable part in the teaching of his dualist and pessimistic creed. Manes was put to death by a later Persian monarch, but Manichaeism spread over Central Asia and reached China, developing a wonderful art and was noted by the Polos, who mistook its followers for Christians. In Europe too it spread to the Albigenses in Aquitaine. St. Augustine of Hippo was a member of this sect before he embraced Christianity.

We have seen China emerging from a state of isolation under the Han dynasty and, later, under the Tang dynasty, becoming a world-empire which extended across Asia from the Pacific Ocean to the Caspian Sea, rivalling in wealth and

importance the older empire of Alexander the Great and that which Rome had created. This chapter shows that no state was more anxious to explore neighbouring countries and open up diplomatic and commercial relations with them. Nor was any empire better served by its explorers. In return, China drew envoys, explorers and missionaries to her shores, to the great benefit of world exploration.

CHAPTER IV

GEOGRAPHERS OF THE ROMAN EMPIRE

> "I would examine the Caspian Sea, and see where and how it exonerates itself after it hath taken in Volga, Jaxartes, Oxus, and those great rivers. I would find out with Trajan the fountains of Danubius, of Ganges and of Oxus."
>
> BURTON, "*Anatomy of Melancholy*".

IN the previous chapter an account has been given of the creation of a great empire by China. It is interesting to note that when the Han dynasty set out on its wonderful career of conquest, Rome had but recently overthrown Carthage in 201 B.C. In the case of both states a civilized power was surrounded by myriads of barbarians who were gradually conquered and civilized. Again, the introduction of Buddhism into China coincided with the arrival of Christian missionaries in Rome, each state respectively adopting the foreign religion.

Their final destinies lay far apart. The Han dynasty disappeared, but China, which during the course of perhaps 2,000 years had gradually assimilated the aboriginal tribes, and whose boundaries needed protection only from the north, has survived to the present day, lamentable as is her condition at the time of writing. Yet China alone can point to undoubted lineal descendants of her illustrious teacher Confucius, whereas neither in Persia nor in Europe do such connections with the remote past exist.

The position of Rome in 201 B.C., after her decisive victory at Zama, signified control, actual or potential, over the Central and Western Mediterranean. Carthage was powerless, and it only remained to annex her trading posts. Spain, too, was included in the spoils of victory, and was annexed, though not without much stubborn fighting. The supremacy of Rome was firmly established in Italy south of the Po, and she was mistress of Sicily, but had not conquered the Gauls of Northern Italy.

As regards the East, Rome had had at this period no contact with the Persian Empire, but in distant Parthia a warlike chief had, in 250 B.C., founded a dynasty which was gradually to annex provinces from the Seleucid power until

MAP SHOWING AREA IN WHICH THE ROMAN EMPIRE WAS ESTABLISHED.

(Reproduced from "The Universal History of The World", edited by J. A. Hammerton by courtesy of the publishers, The Educational Book Co. Ltd.)

Parthia became the protagonist of the East. As such she inflicted terrible defeats on the Roman armies, which time and again invaded Parthia, and for considerable periods made the Tigris, instead of the Euphrates, the boundary of the Parthian Empire.

The heirs of Alexander the Great were represented by Philip V of Macedon, by Antiochus III, who ruled over the vast empire of the Seleucids, and by Ptolemy V of Egypt, a boy-king who was under the protection of Rome. Arsaces III of Parthia was steadily annexing districts to the west when Antiochus appeared on the scene, and, following in the footsteps of Alexander, captured Hecatompylos and defeated Arsaces, who accepted his terms. He then marched through Bactria to the Punjab, where the successor of Asoka wisely bought off the invader with gifts of elephants and much gold. The Seleucid then followed the route taken by Craterus and probably wintered in the same valley of Rudbar in which Alexander had halted. He ended his expedition at Seleucia on the Tigris and assuredly well earned his title of " Great ". This beating of the bounds of his Empire undoubtedly added to Europe's knowledge of Central Asia and India, taking place as it did more than a century after the famous expedition of Alexander the Great.

Rome decided to crush Philip of Macedon, who had shown hostility to her during the Punic Wars and had foolishly stayed his hand when Rome was staggering under the weight of the blows delivered by Hannibal. Philip was defeated at Cynoscephalae in 197 B.C. Antiochus, who had not supported Philip, was finally overthrown at Magnesia in 190 B.C., while Macedonia was definitely crushed at Pydna in 168 B.C. Polybius dates the establishment of the Roman Empire from this last battle, which laid the Near East at her feet. Yet it is noteworthy that not an acre of land in Asia was annexed as the immediate result of these great victories.

Not until 133 B.C. do we find Rome appearing as a territorial power in Asia. The King of Pergamum had died without leaving a son, and bequeathed his state, the Lydia of Croesus, to the Roman people. The Senate accepted this valuable heritage, which made them the neighbours of Pontus, Armenia and Parthia; and from this period, which terminates with the victory of Octavian at Actium in 31 B.C., Rome advanced from strength to strength. Simultaneously with this expansion in every direction, the lands surrounding the Mediterranean were explored, and to a certain extent surveyed,

if only by the road-makers of Rome. Northwards, Western Germany and Gaul were annexed, while South Britain was reconnoitred. Eastwards, Asia Minor and Syria were absorbed, while Armenia and various provinces to the south of her mountains formed a bone of contention with Parthia.

This expansion was illustrated by a number of soldiers, merchants, explorers and geographers, whose reports formed the basis of the works of Polybius, Strabo and Ptolemy. The historian Polybius (204–122 B.C.) served on the staff of Scipio, who employed him to explore the coast of North Africa. He also explored parts of Gaul and Spain, while his knowledge of the geography of the Alps and of Italy was superior to that of any of his predecessors.

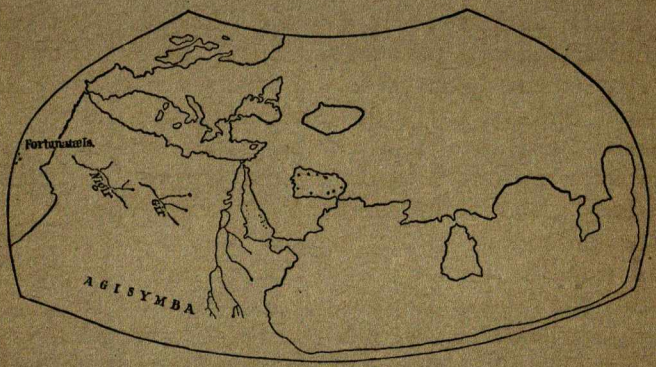
After Polybius came Strabo, who was born in Pontus about 63 B.C. He also travelled far and wide, and had penetrated into Egypt as far south as Syene and Philae. But his importance mainly lies in his work as a systematic compiler of accounts of other men's explorations. Basing himself on Eratosthenes and on Greek rather than Roman authorities, Strabo was the first writer to conceive the scheme of a work not only geographical, but also mathematical, physical, historical and political. He realized what a vast extension of geographical knowledge had taken place, but was struck by the comparative smallness of the known world, and acutely suggested the existence of hitherto unknown continents. Strabo reduced the width of the world to less than the estimate of Eratosthenes, from 3,750 to 2,872 geographical miles, and unwisely rejected the explorations of Pytheas.

The great geographer of the Roman Empire was Claudius Ptolemaeus, commonly known as Ptolemy, who flourished during the second century A.D. His *Geographike Syntaxis* was the most considerable attempt of the ancient world to place the study of geography on a scientific basis.[1] The point which chiefly affects us in this work is the increased knowledge of the world which Ptolemy displays. To the north Thule is placed in latitude 63° N., which is not far from the true position of the Shetland Islands. With it are the northern parts of Europe and the unknown lands of Northern Asia. In the reign of Nero a Roman knight led an expedition to the Baltic to purchase amber. In this he was successful, and he reported that the amber coast was situated about 600 miles

[1] Ptolemy divided the world by parallels of latitude reckoning from the equator, and by parallels of longitude reckoning from the island of Ferrol the most western point that he knew.

north of Carnuntum on the Danube, just below modern Vienna, which estimate for the caravan route was accurate. Again, Corbulo's map of Armenia and of the neighbourhood of the Caspian, which is mentioned by Pliny, shows the latter as a sea with the Volga and other rivers, including the Oxus, flowing into it; albeit he does not name the rivers, and the width of the Caspian is considerably exaggerated.

Arabia in ancient times was a relatively fertile country, with at least three great rivers flowing from the western mountains across the huge peninsula to the sea. Of these great rivers there are distinct traces in dry *wadis* traversing the modern *Arabia Deserta*, though to-day there is no perennial river in the peninsula. The question of rainfall is of great importance in Arabia. For instance, the visitor to Aden is



THE WORLD ACCORDING TO PTOLEMY, A.D. 150.

shown magnificent reservoirs, mainly hewn out of the solid rock, on which the inhabitants of this ancient port, which is mentioned in the book of Ezekiel, undoubtedly depended for their water-supply. Since the British occupation in 1839, these reservoirs have never been more than one-eighth full: indeed, they are generally empty. It is therefore clear that there has been a marked movement towards desiccation in Arabia, at any rate throughout the Christian era.

Sabaean inscriptions date back to the ninth or tenth century B.C., and in the Book of Kings we have an account of a Queen of Sheba who came to prove Solomon "with hard questions". This visit would have taken place about 950 B.C. The Sabaeans lived in North Arabia at this period, and, so far as is known, they moved southwards during the ninth and eighth centuries.

The story of Job, "a man in the land of Uz", is the subject

of an interesting theory advanced by Bertram Thomas, who, with reference to his comforters, would identify Eliphaz the Temanite with the Bani Teman, Bildad the Shuhite with the Shihuh (who inhabit the country round Daba in the neighbourhood of Cape Musandam), and Zophar the Naamathite with the Naim tribe. All these tribes inhabit the Oman district, while Uz is found in Azd, the ruling tribe of Maskat. To quote his summing up: "The Book of Job is held by many to have been written not earlier than the time of the Babylonian captivity, and it would appear not unreasonable to suppose that it was Musandam . . . upon which a Babylonian author of the book drew for his local colour." [1]

The Sabaeans conquered the Minaean dynasty and established themselves in Yemen. We hear of a second dynasty of "Kings of Saba", who began to rule about 550 B.C. with their capital at Marib. In 115 B.C. they were succeeded by the Himyarites, who constructed the celebrated dam of Marib. The Abyssinians overthrew the Himyarite dynasty early in the sixth century A.D., and established Christianity in parts of Arabia, but in 575 a Persian expedition despatched by Noshirwan restored a scion of the Himyaritic family, who ruled for a short period under the overlordship of Persia.[2]

The prosperity of Arabia was due to the fact that the Indian trade in spices, drugs, and perfumes reached Ophir, probably the modern Dhufar, and was thence carried by caravans through Mecca, Medina and Petra to the Mediterranean. Dhufar, too, it will be remembered, produced frankincense and possibly gold. Arabia remained a rich, mysterious land to the inhabitants of the Roman Empire until Augustus despatched an expedition under Aelius Gallus which in 25 B.C. landed in Hejaz with Yemen and Hadramaut as its objectives. Their route lay through Negrana (the modern Nejran), and the army reached Marib, the capital of the Himyarite kingdom. Thence it was not very far to the Incense Land of Hadramaut, but the Roman general, disillusioned as to the reputed wealth of *Arabia Felix*, marched back to the coast and left the Arabs to themselves. This expedition enabled Ptolemy to enumerate the towns and villages of *Arabia Felix* with some accuracy, while various caravan routes were outlined.

In Africa exploration followed up the valley of the Nile, passing the junction of the Blue Nile and continuing as far as the *Sadd*, which is described. Ptolemy shows that the

[1] *Alarms and Excursions in Arabia*, by Bertram Thomas, pp. 230–1.
[2] *History of Persia* (3rd ed.), Vol. I, p. 455.

source of the Blue Nile was in a lake in the east, and that the White Nile had its origin in important lakes, which were fed by the snow waters of the "Mountains of the Moon". It is probable that this information, which was finally proved to be correct, was gained from traders in touch with the east coast of Africa rather than from dwellers in the Nile Valley. The Romans also undertook an expedition against the Queen of Ethiopia in 25 B.C., which added to their knowledge of the borders of that country.

In view of the importance of Ptolemy's opinions, which influenced explorers down to the eighteenth century, I quote him at some length. "The uninhabited part of the earth is bounded on the East by the unknown land which lies along the region occupied by the eastern nations of Asia Major, the Sinae and the nations of Seres, and, on the South, by the unknown land which shuts round the Indian Sea, and encompasses that Ethiopia to the south of Libya and Europe; and on the North by that continuation of the same ocean which encircles the Britannic Isles." In this summary we have the theory of the existence of a great southern *Terra Incognita*, which made the Indian Ocean an inland sea. The eastern extension of Asia was also enormously exaggerated, a fact which will be referred to later in this work. There is, however, a distinct recognition of the sea route to China, and a comparison with the map of Herodotus will show how considerable was the advance in geographical knowledge of the world since he wrote in the fifth century B.C.

At the same time these errors and the belief that the habitable world of the north temperate zone was separated from a similar temperate zone in the south by an impassable area of deadly heat, hindered the progress of exploration for more than 1,000 years.

To turn to the question of commerce, at no period was the Mediterranean Sea so free from pirates, while the enormous empire could be traversed in every direction with reasonable safety. It produced every requisite in its provinces except perhaps spices and incense, and this fact made for a flourishing internal trade, which was encouraged by the stable and uniform currency.

Under Augustus the navigable canals of Egypt were cleaned out, and military operations were conducted on both sides of the Red Sea to check raiding and piracy. Trade with India flourished, and Strabo reported that 120 ships were engaged in it. About the middle of the first century A.D., a sea-

captain named Hippalus discovered that voyages could be made from the Red Sea to India out of sight of land, thanks to the steady monsoon winds. As a result of this discovery trade with India increased to such an extent that Pliny bewails the huge sums spent upon eastern luxuries. Large quantities of Roman coins have been discovered in Southern India, whence came spices and pearls, while silk, perfumes and ivory also reached Rome in considerable quantities.

Hippalus left no record of his epoch-making discovery, but a book by an unknown author giving commercial information was published about A.D. 60 under the title of *Periplus Maris Erythraei*. In it a description is given of the east coast of Africa almost as far south as Zanzibar; the south coast of Arabia and the west coast of India are also treated with some accuracy, while the silk trade is described as following the routes mentioned in Chapter III. In the next century traders reached Zanzibar, while, as we have already mentioned, Roman merchants penetrated to China.

Julius Caesar, the only Roman who can be compared with Alexander the Great, resembled the illustrious Macedonian as a great explorer. He not only conquered Gaul, but made the first reconnaissance of Britain. A brief account of both these enterprises will be given.

We first hear of Gaul at the foundation, about 600 B.C., of the Greek colony at Massilia, whose citizens are known to have opened up relations with the Gallic tribes inhabiting the Rhone Valley. Rome took her first forward step in the country by annexing the hinterland of Massilia in 121 B.C., which, with its port of Narbo Martius (Narbonne), constituted the province of *Gallia Narbonensis*. Later followed the campaigns so well described in Caesar's *Commentaries*. His first very serious task was due to movements of tribes which, as already mentioned, have played a decisive part in world history. The Teutonic tribes on the right bank of the Rhine were pressing in on the Celtic Helvetii, occupying the western portion of modern Switzerland,[1] with the result that the Helvetii decided to initiate a tribal migration westwards, a movement that would have constituted a serious menace to Gaul. The year 58 B.C. was consequently spent in attacking the Helvetii and driving them back to their mountains. The German tribe of the Suevi (Swabians) had next to be dealt with. They had crossed the Rhine and attacked the Aedui, who lived on the northern borders of the Roman province.

[1] Their capital, in Roman times, was called Aventicum. It is now Avenches.

Accordingly Caesar marched to help his allies and defeated the Suevi with crushing losses. This defeat alarmed the Belgae of North-East Gaul, whose leading tribe, the Nervii, Caesar attacked in the following year. The Roman army was very nearly overwhelmed, but Caesar's personality finally won a great victory. He then led, or sent, columns through the south-west (Aquitania) and the north-west (Armorica), and gradually annexed the country. In 55 B.C. a fresh invasion of German tribes was hurled back, and Caesar himself crossed the Rhine and raided their country, but wisely decided that that great river should constitute the boundary of the Roman Empire. Caesar was the conqueror and explorer, and Augustus organized his uncle's conquests. Caesar and Augustus thus laid the foundations of the greatness of France, which owes to Rome both its civilization and its language.

To turn now to Britain, in the late summer of 55 B.C., Caesar organized an expedition at Portus Itius, now Boulogne. As he himself wrote in *De Bello Gallico*:[1] "He understood that in almost all the Gallic campaigns succours had been furnished for our enemy from Britain; and he supposed that if the season left no time for actual campaigning, it would still be of great advantage to him merely to have entered the island, observed the character of the natives, and obtained some knowledge of the localities, the harbours, and the landing-places."

Acting on information gained by a tribune who had reconnoitred the coast in a galley, Caesar landed his force on the beach between Walmer and Deal. The invaders were strenuously opposed by the British, who drove their chariots into the sea, until, aided by the galleys which enfiladed the British, the landing was successfully accomplished and the Chief sued for peace. While negotiations were in progress, Caesar's fleet was partially wrecked, and the British resumed hostilities; finally, however, terms were made, hostages were given, and Caesar, who had narrowly escaped disaster, returned to Gaul.

In the following year he landed near Sandwich at the head of a powerful army, and, marching inland, defeated the British near Durovernum, later Canterbury. He was recalled to the coast by a report that many of his ships had been wrecked, and this retrograde movement encouraged the British to resist more stoutly. Their chief leader was Cassivel-

[1] Translated by H. J. Edwards for the Loeb Library, 1917.

launus, whose dominions became the Roman objective. After again defeating the British, Caesar crossed the Thames not far from Brentford. The bed of the river was staked, as was its left bank, but the legionaries would not be denied, and Cassivellaunus was defeated. He retired on his capital Verulamium (St. Albans), which was carried by assault. Cassivellaunus realized that he was beaten, and, as an attack on the naval camp had been repulsed with heavy loss, he sued for peace, which was granted on the terms of payment of tribute and the surrender of hostages. When the pledges had been handed over, the Roman army marched back to the coast and returned to Gaul.

Caesar estimated the circumference of Britain at 3,000 miles, a very accurate calculation. Moreover he noted that the Britons, generally speaking, did not grow much wheat, but lived on milk and flesh; they did not make cheese. He also referred to the use of woad, "which produces a blue colour, and makes their appearance in battle more terrible".

"Caesar", Plutarch writes, "was the first who brought a navy into the western ocean, or who sailed into the Atlantic with an army to make war; and by invading an island, the existence of which was a matter of controversy among historians, he might be said to have carried the Roman Empire beyond the limits of the known world."

The ultimate conquest of Britain was inevitable, if only because of the racial connection of its people with Gaul. Augustus seriously considered it, but it was not actually undertaken until, after the death of Cunobeline, who was friendly to Rome, his son Caractacus headed an anti-Roman party and expelled a brother of his, who appealed for aid to the Emperor. Taking advantage of this pretext, in A.D. 43 a powerful force, 40,000 strong, landed in Kent and marched on London. The Emperor Claudius himself took part in the expedition, which crossed the Thames and captured Camulodunum (Colchester). Using London as their base, three columns swept the south, the midlands, and the east with such success that, in four years, the country south of the Humber and east of the Severn was annexed without any particularly stubborn resistance being encountered, except from Caractacus in the west. That king was finally defeated on the borders of Wales in A.D. 50, and was betrayed to the Romans in the following year.

The revolt of Boadicea, whose husband ruled the Iceni of East Anglia under Roman suzerainty, was caused by Roman

injustice at his death. His dominions, which he had bequeathed to Rome, were taken over with great brutality, and Boadicea, "bleeding from the Roman rods", rose in revolt. The inhabitants of South-East Britain joined in the insurrection and destroyed Verulamium (St. Albans), Colchester and London, massacring the Romans settled in the country and nearly annihilating the ninth legion. Rome, however, quickly reasserted her authority, and practically the whole of lowland Britain was explored and annexed, as was Southern Scotland. The latter territory was guarded by a wall built by Antoninus Pius from the Firth of Forth to the Clyde.

In 120 Hadrian began the construction of the celebrated wall which still runs from Wallsend to Bowness near Carlisle, a distance of eighty miles. This, the most important Roman work in Great Britain, consisted in its final form, as rebuilt by Septimius Severus in 207, of a strong stone wall defended by seventeen forts with castles and towers at close intervals. The terrain reminded me of the celebrated *Chemin des Dames*.

As to the important question of communications, Ermine Street, which connected London with York, and Watling Street, which ran *via* Uriconium (Wroxeter) to Chester, together with the south-west road to Silchester, Caerleon and Exeter, were of primary importance. Indeed, the road-makers of Rome were her chief explorers. Again, the Romans introduced the walnut, beech, elm, chestnut, sycamore, cherry, peach, pear and fig; also the deer, the hornless sheep and the pheasant. Under their influence the mining industry was greatly developed, tin, iron, lead, copper, gold and salt being all produced in increased quantities. The chief exports were slaves, tin, cattle, iron and skins, with which chains, amber, glass and metal goods were purchased.

Britain owed much to Rome, whose hegemony lasted for a period as long as that which separates the present generation from the Tudors. Education made considerable progress, trade flourished, the upper classes were civilized to some extent, and the poorer people at least had their horizon widened and their food supply improved and better assured.

CHAPTER V

EXPLORATION UNDER THE CALIPHATE

> "The King of Sarandib gave me a cup of ruby a span high; and a bed covered with the skin of a serpent which swalloweth the elephant, and whoso sitteth upon it, never sickeneth, and a slave-girl like a shining moon."
>
> *Sindbad the Sailor.*

THE rise of Mohammed, the Prophet of Arabia, is one of the most stupendous events in history. He appeared at a time when both the Byzantine and Persian empires were exhausted by a long series of desperate campaigns, which seriously weakened Byzantium and created a state of anarchy in Persia. The Arabs, fervent believers in the creed which united them, and perhaps attracted still more strongly by the lure of rich spoils, once again swarmed from the desert to the sown, and founded the greatest empire that the world had seen, stretching from the borders of China on the east to Morocco, which is washed by the waves of the Atlantic Ocean, on the west, a distance of some 7,000 miles.

The early campaigns of the Moslems, who attacked the two neighbouring empires simultaneously, displayed an utter lack of strategical knowledge, but their valour was irresistible. The fruits of victory included Syria, taken from the Byzantine Empire, while, at the battle of Cadesia in A.D. 636, which ranks with Issus in its decisiveness, the great Persian Empire was overthrown. At the battle of Nahavand, fought on the Iranian plateau in 642, the *coup de grâce* was given. Like the unfortunate Darius, Yezdegird, the last monarch of the Sassanian dynasty, fled eastwards. He sought help from China in vain, and was finally murdered at Merv in 652 for the sake of his jewels.

Mohammed died in A.D. 632, and was succeeded by his staunch supporter Abu Bekr, who thus founded the Caliphate.[1] During his short rule of two years the Arabs continued their advance, but Omar, who succeeded him, was the greatest Soldier Caliph, capturing Damascus, Antioch and Jerusalem,

[1] The correct title of the Caliph is *Khalifa Rasul Illah* or "Successor of the Prophet of Allah".

feats of arms soon followed by the annexation of Egypt and the advance of the Moslems along the coast of North Africa to Barca. Omar was assassinated in 644, and his successors Othman and Ali also met violent deaths, the latter, who was the son-in-law of the Prophet, being assassinated in 661. His son Hasan retired in favour of Moawiyah, the Governor of Syria, who founded the Omayyad dynasty.

It is of considerable interest to note that in the annals of the great Tang dynasty, whose power was acknowledged to the south of the Hindu Kush and whose influence extended to the Caspian Sea, we read that "Ta-tsin has, in later days, been called Fu-lin". This is the Greek word πόλιν or "the city", by which term Constantinople was known. A description is given of the city, surrounded by a continuous belt of towns and villages, with its Golden Gate 200 feet high, its palaces with "colonnaded porticoes and parks with rare animals", and of the dazzling costume of the monarch. Of still greater interest is a reference to Moawiyah: "The Ta-shi (Arabs), having overrun kingdom after kingdom, at last sent their General-in-Chief, Moi, to lay siege to the capital of Fu-lin. . . . The negotiator of the peace which followed made it one of the conditions that the Ta-shi should every year pay tribute consisting of gold and silk-stuffs." We know from other sources that Moawiyah's fleet was destroyed by "Greek fire", and that his army was defeated, with the result that he was obliged to sue for peace and paid tribute. This is, so far as I know, the earliest reference in the Chinese annals to a great historical event in Europe.

In 742 we hear of a mission "composed of priests of great virtue" visiting China, and then, since the Moslems formed an impassable barrier between the two nations, there was a cessation of friendly intercourse for centuries.

The Moslems under the Caliphate penetrated deeper and deeper into Asia, where, it must be remembered, they considered themselves as explorers. During the years 705 to 714, Bokhara, Samarkand, Farghana and finally Kashgar fell into their hands. Alexander had penetrated only to the Syr Darya, whereas the Moslems advanced across the Tian Shan hundreds of miles farther east. A curious story has been preserved relating to this campaign. The Arab general had sworn an oath to take possession of the soil of China, whereupon the "king"—probably the local governor—released him from his oath by the despatch of a load of soil on which he might trample, a bag of Chinese money to symbolize

tribute, and four royal youths on whom he imprinted his seal. We learn from other sources that the Tibetans became allies of the Arabs, whose support they received in Chinese Turkestan —so wide was the range of the Arabs at this period.

We hear of an Arab embassy to China in 713. The envoy demanded exemption from the *kotow*, stating that he "bowed only to Allah, never to a Prince". At first it was decided to kill the bold Arab, but wiser counsels prevailed, and the emperor graciously pardoned him. Relations between the two countries were not always friendly. Indeed in 709 a force commanded by the Emperor's nephew had joined in the coalition against the Arabs who were invading Bokhara. There were also appeals for help against the Arabs from Tabaristan, one of the Caspian provinces of Persia, whose rulers maintained their independence for a century after Nahavand. Later, embassies, including one from Harun-al-Rashid, were received at the court of China.

At this period a Moslem force marched through Makran to Sind, where Multan was captured, yielding wealth beyond the dreams of avarice. Almost perforce, so long as the tribute was paid, the Arabs permitted the worship of idols, in direct violation of the orders of Mohammed.

Under Abdul Malik and his son Welid, who ruled successively from 692 to 714, the Caliphate reached its zenith. Not only had Arab armies marched across the frontier of China and to the Indus, but the conquest of Spain constituted a third splendid achievement. In 717 the Arabs made a second attempt on Constantinople, which again ended in disaster to their fleet and to their army.

The Saracens, as they are termed in Europe throughout the Middle Ages, had crushed the Visigoths and conquered Spain in two years, save for a few mountainous districts in the north-west. In 720, under Abdur Rahman they crossed the Pyrenees and besieged Toulouse. They were driven off by Duke Eudo, but retained Narbonne, and in 724 they raided Burgundy. In 732 Abdur Rahman reappeared in Aquitaine with a large force and drove Eudo across the Loire. Charles Martel came to the rescue, and after a hard-fought battle near Tours, in which Abdur Rahman was killed, the Moslems fled. Thus Islam had reached its limit, although the Riviera suffered for many generations from Saracen raids.

In 749 the Omayyad dynasty was overthrown by the Abbasid family, which was descended from the uncle of the Prophet. The Omayyad dynasty and Islam had been inter-

changeable terms, but after its fall, a refugee scion founded a dynasty in Spain which became very powerful, while the authority of the Abbasids was only intermittently acknowledged in Africa. The Abbasid capital was at Baghdad. Who has not been thrilled at the descriptions of the wealth and romance of that city under its famous Caliph, Harun-al-Rashid? It is of interest to note that Charlemagne despatched an embassy to the Caliph to arrange for easier access to the Holy Sepulchre and to foster trade relations. Harun was most cordial, and by a return mission presented the keys of the Holy Sepulchre to the Emperor of the West; he also gave him an elephant, the first to be seen in Western Europe for many centuries.

The earliest Arab to reach China of whom a record has been preserved was Sulayman the merchant, who, starting from the Persian Gulf, made several voyages to India and China about the middle of the ninth century. His description of the latter country includes a full reference to the use of tea: "The people of China are accustomed to use as a beverage an infusion of a plant, the leaves of which are aromatic and of a bitter taste. It is considered very wholesome."

Under the Abbasid dynasty we have early geographers, beginning with a compiler of routes, followed by travellers who systematically describe each province in turn.[1] Of these worthies the earliest was Ibn Khurdadbih, who was postmaster of the Jibal province, the classical Media, in the ninth century. Khurdadbih describes the great Khorasan road, which, starting from Baghdad, crossed the Jibal province to Hamadan. Thence it took the same line as that followed by Darius in his flight to Rhages or Rei and to Damghan and continuing eastwards it reached Nishapur and Tus. From the latter place it went on to Merv, crossing the Oxus at Amul and passing Bokhara, and so "along the golden road" to Samarkand. Beyond Samarkand it made for Farghana, and finally ended at Uzkand on the borders of China, where it met the famous Silk Road. Khurdadbih compiled what would now be termed a Route Book, but a century later Istakhri, who travelled to India, and Mukaddasi, who wrote mainly from personal observation, provided much valuable information on the provinces of the Caliphate.

My own personal preference for many years has been for the encyclopaedia of Masudi, entitled in the French trans-

[1] *The Lands of the Eastern Caliphate*, by Guy Le Strange, p. 11 *et seq.*

lation *Les Prairies d'Or*. Masudi travelled all over the known world from Spain in the west to Turkestan in the east, while Sofala, Zanzibar, Sind and China are all mentioned by him. He was the first Arab explorer to visit the Sea of Aral. But Idrisi, although not the greatest of these Arab geographers, exercised more influence on Europe, both directly and indirectly, than any of his predecessors. Educated at Cordoba, he travelled widely in Europe, visiting France and England. He also journeyed over Asia Minor. Finally he settled at the court of Roger II, the Norman King of Sicily, and, working at Palermo, completed his famous map, which was engraved on a silver tablet in 1154.

Idrisi's map consisted in its original form of seven horizontal strips for the seven climates of the Arabs. It is especially interesting in view of the voyages of the Portuguese round Africa, with which we will deal very briefly. Idrisi, who was well acquainted with the map of Ptolemy, shows the Egyptian Nile as having its sources in lakes, but he depicts a great river, the Nil-al-Sudan, flowing from the central lake of the Egyptian Nile due west to the Atlantic. In other words, he creates a composite river, consisting mainly of the Niger and Senegal Rivers. To quote Idrisi:[1] "The towns are Mellil, Ghana, Shermi, Marasa, etc." Mellil, the Malli of Ibn Battuta, is described as belonging to the kingdom of Lamlam, "which touches the eastern boundaries of Wangara, the Land of Gold". The gold of Ethiopia had been mentioned by Herodotus, who wrote: "Where the south declines towards the setting sun lies Ethiopia. There gold is obtained in great plenty, huge elephants abound . . . and the men are taller and longer-lived than anywhere else." Cambyses, the conqueror of Egypt, started off to annex these lands abounding in gold, but the expedition ended in disastrous failure. This delightful theme might be pursued further, but we will conclude by pointing out that, on the east coast of Africa, Idrisi mentions the ports of Malindi, Mombasa and the gold-lands of Sofala.

The *Arabian Nights*, the world's best story-book, underlying its marvels, gives a fairly accurate account of the voyages of the hardy Arab mariners. Seven voyages in all are recorded, each of which had for its objective a port or ports in the Indian Ocean. In the delightful company of Sindbad we visit the Spice Islands, we escape from whales, we see flying fish. Again we visit the east coast of Africa, and in Madagascar that fearsome bird, the roc, is made to carry our traveller to

[1] *Géographie d'Édrisi*, by P. Jaubert, 1836.

the Valley of Diamonds in Southern India. In a later voyage he visits Ceylon, where he receives the gift referred to in the motto to this chapter. Of him it might well be said:

"I have gone so far towards the setting sun
That I have lost all remembrance of the East,
And my course has taken me so far towards the rising sun
That I have forgotten the very name of the West."

It would be beyond the scope of this book to deal with these Moslem geographers in detail, but an example may be given of the great value of their work as epitomized by Mr. Le Strange. When occupying the post of Consul at Kerman, I read that the ancient capital of the province had been As-Sirjan, and utilizing the information he gave, I was able to discover this important site. It occupies a limestone hill, and constitutes a position of great strength with its walls and buildings in ruins. A stone pulpit[1] with a beautifully cut inscription in honour of Sultan Ahmad of the Muzaffar dynasty, bearing date 1387, was the most interesting find. This discovery was entirely due to the indications of the Moslem geographers.

Under Mamun, who was Caliph in the earlier part of the ninth century, Arabian science reached its zenith. Mamun "created the first school of geographical science which had been seen since the Antonines. . . . An observatory was founded at Baghdad, where attempts were made to determine the obliquity of the ecliptic. Once again, Mamun caused a simultaneous measurement to be taken, in Syria and in Mesopotamia, of a space of two degrees of the terrestrial meridian."[2]

It is indeed remarkable how strong was the passion for travel at this period. To some extent this is proved by the distant centres from which Baghdad drew its most famous professors. The greatest of all Moslem philosophers, al-Farabi, came from the banks of the distant Oxus; others hailed from still more distant Farghana, from Khwarizm (Khiva), and Sinna (in Kurdistan). It is well to recognize that what medieval Europe knew of Greek philosophy, chemistry, mathematics and astronomy, it learnt from indifferent Latin translations of Arabic manuscripts. They in their turn had for the most part been translated from Greek into Arabic at the university of Nisibis, a Nestorian Christian institution.

[1] *Lands of the Eastern Caliphate*, p. 300; and Sykes, *History of Persia* (2nd ed.), Vol. II, p. 114, for illustration of the pulpit.
[2] *Dawn of Modern Geography*, by Sir Raymond Beazley, Vol. I, p. 409.

The last of the Arab geographers was Yakut. He flourished early in the thirteenth century, and compiled the famous *Dictionary of the Countries*. To this work I am myself deeply indebted for the identification of various Persian sites, more especially for the birthplace of Firdausi, the great epic poet of Persia.[1]

In conclusion, it is worthy of mention that one of the Seljuk monarchs, who reigned towards the end of the eleventh century, employed Omar Khayyám and other scientists to compute a new era, which was named the Jalali era after their royal master. As the Bard of Nishapur wrote:

> "Ah, but my Computations, People say,
> Reduced the Year to better reckoning?—Nay,
> 'Twas only striking from the Calendar
> Unborn Tomorrow, and dead Yesterday."

[1] Sykes, *History of Persia*, Vol. II, pp. 60–2.

CHAPTER VI

THE VIKINGS

"Floki, son of Vilgerd, held a great sacrifice and consecrated three ravens which should show him the way to Iceland; for at that time no men sailing the high seas had lodestones up in northern lands."

The "Hauksbok" on the Colonization of Iceland.

"But northward Hermod rode, the way below;
And o'er a darksome tract which knows no sun,
But by the blotted light of stars, he fared.
And he came down to ocean's northern strand
At the drear ice, beyond the giant's home;
Thence on he journeyed o'er the fields of ice
Still north, until he met a stretching wall
Barring his way."

MATTHEW ARNOLD, "*Balder Dead*".

THE homeland of the Nordic races was unknown to the ancient geographers. But while great events were taking place in Asia and in the Mediterranean area of Europe, in the long centuries before the Christian era, a race of men, with distinctive mental and moral characteristics, was being developed on the northern shores of the Baltic Sea and on the Atlantic coast of Scandinavia. Seamanship and courage were being moulded by the stormy seas, while the scantiness of their agricultural resources impelled these Norsemen to depend upon their fisheries and to face the risks of the open sea as the Mediterranean races never did. Their mode of life favoured the development of ships more seaworthy than those of the south, together with a spirit of adventure that has seldom been equalled and never surpassed. We have seen how the old navigators timidly hugged the coast and seldom left it willingly, whereas the Norsemen were the first to make long voyages by sea and to discover new countries in their sea-going ships.

The "Viking Age" indicates the period from about 750 to 999, during which the Norsemen began their raids on Europe by sea, which resulted in their carving out more than one kingdom in fertile lands. So far, in the course of our survey of the movements of peoples, their migrations were carried out by land and were intended to be permanent settlements. In

consequence, these early immigrants were accompanied by their families, their cattle and their worldly goods. The Vikings, on the other hand, for at least a century, came to plunder and returned to their homes for the winter.

In 787, three of their vessels raided the south of England, and, according to the *Anglo-Saxon Chronicle*, this was the first of the Viking raids, which began an era of murder and destruction. Before this they had come as traders, spying out the land, but now they inflicted greater harm on Europe than ever the Saracens had done. It is told of Charlemagne that, not long before his death in 814, he was at a town near Narbonne when strange sails were observed, and it was questioned whether they were Jewish, African or British traders. Charlemagne, however, said, "No bales of merchandise are borne hither by yonder ships. They are manned by terrible enemies . . . and I grieve to think of the evils that they will bring on my successors."

In the ninth century the iron rule of Harold Fairhair of Norway drove out the wilder spirits of the land, who, in large numbers, emigrated to the Orkneys, the Shetlands, Scotland and Ireland. Farther afield the Rhine, the Seine and the Loire were ascended by the Viking fleets, whose warriors sacked most of the great cities from Paris in the north to Bordeaux and Toulouse in the south. When travelling in Morocco some years ago, I heard of a very early Viking raid on Arzilla, which was apparently the farthest point along the African coast which they harried. In the Mediterranean they sailed up the Rhone, and in Italy they plundered Pisa. By the middle of the ninth century the Vikings had established permanent camps at the mouths of the great rivers, from which they despatched powerful expeditions aiming not merely at plunder but at conquest.

To give familiar examples of their success, in the latter half of the ninth century King Alfred was engaged in a desperate struggle against the Danes, and he deserves immense credit for organizing the army with which he finally defeated the invaders. By the Treaty of Wedmore in 878 and by Guthrum's Fryth in 884, the boundaries of the Danelaw were laid down by a line drawn along the left bank of the Thames to London and thence north-west to the River Dee.

About 890, Othere of Halogaland [1] sailed round the North Cape and along the Lapland coast to the White Sea, which he discovered.

[1] Halogaland was a district of Norway situated between 65° and 66° N.

According to his account:

"He said that he was desirous to try, once upon a time, how far that country extended due north, or whether anyone lived to the north of the waste. He then went due north along the country, leaving all the way the waste land on the right, and the wide sea on the left. After three days he was as far north as the whale-hunters go at the farthest. Then he proceeded in his course due north, as far as he could sail within another three days; then the land there inclined due east, or the sea into the land he knew not which; but he knew that he waited there for a west wind or a little north, and sailed thence eastward along that land as far as he could sail in four days. The land then inclined due south, and he sailed along the coast due south, as far as he could sail in five days. There lay a great river up in that land."

This intrepid explorer described his voyage to the River Dwina, on which Archangel is now situated, to Alfred the Great, who embodied it as a geographical introduction in his Anglo-Saxon translation of the *General History* of Orosius, which has thus preserved for us this record of the daring Viking explorer.

On the other side of the Channel, by the treaty of Saint Clair-sur-Epte, Charles the Simple, in 911, was obliged to agree to the cession to Rollo, the chief of the "Northmen", of Rouen and of the lands stretching down to the mouth of the Seine. Rollo acknowledged himself the vassal of the French King: he also agreed to become a Christian, and his tomb is in Rouen Cathedral. A century and a half later, England was conquered by the "Northmen" of Normandy. We ourselves may thus claim to have much Norse blood flowing in our veins, and to it we mainly owe our love of exploration and adventure.

The Vikings, who attacked and settled in Western Europe, were mainly the inhabitants of Norway and Denmark, whereas the Swedes devoted their energies to Eastern Europe. In the ninth century they sailed up the Neva to Lake Ladoga and thence followed up the Volkhof to Lake Ilmen. There they built the fort of Novgorod, to serve as a mart for their trade with the Black Sea, exchanging slaves, furs, amber, honey and wax for weapons, metals and tissues. In 862 Rurik, the leader of these Varangians (or Franks) as they were called, established his rule over the surrounding tribes and laid the foundations of the Russian Empire. Three years later two other Varangian leaders marched on Kiev and founded a kingdom which was subsequently absorbed by Novgorod. Hardly were they established at Kiev when they descended the Dnieper in 865 and plundered the monasteries and palaces

which lined the Sea of Marmora. They surprised the Byzantine authorities, who, in the absence of the army and fleet with the Emperor, were powerless to resist, and we are told that "they made a great slaughter of Christians". However, a storm "wrecked the fleet of the Russian pagans so that but little of it escaped from disaster". Undeterred by their losses, the Russians on four occasions during the tenth century attacked Miklagard or the "Great City", but its walls were too strong, and peace treaties usually concluded these hostile operations. At the end of the tenth century the Russians were invited by the Emperor to attack the Bulgars. This they did with complete success, and decided to annex the entire country and to move their capital from Kiev to Pereyaslavetz on the Danube. The Emperor, realizing the peril of a strong power holding the Balkans, faced the emergency, and the danger was finally averted after much hard fighting.

The peace of 971, followed by the conversion of Russia to the Christianity of the Greek Church, terminated the era of hostilities between the Princes of Kiev and Byzantium, where their "barbaric yawp" had caused grave alarm.

Against their raiding propensities must be set the fact that the Vikings were great traders. We hear of them in the ninth century meeting the merchants of Baghdad at Rei (Rhages), close to modern Teheran, and again as bringing their wares to Baghdad itself. This commerce reached Europe through the Baltic, where Wisby in the island of Gottland served as an entrepôt for the distribution of Oriental products in Northern Europe. The discovery of vast hoards of Anglo-Saxon money in Gottland proves conclusively that our own ancestors purchased their spices at this mart.

The Vikings were born explorers, and when Harold Fairhair attacked the Norse colonies in the islands, whose inhabitants were guilty of raiding Norway, it was decided to colonize Iceland, which had been first discovered by Irish monks about 795 and by Norsemen in 870. In the course of a generation this great feat was accomplished, and the descendants of these colonists, who still inhabit the same lands that their forefathers marked off in this empty country, have recently celebrated the millennium of the establishment of a central moot for the whole island and of "a speaker to speak a single law".

Greenland, the large continental island to the west, situated within a few days' sail of Iceland, was discovered later. In 982 Eric the Red spent three years exploring its south-west

coast. Upon his return to Iceland, he gave such glowing accounts of the country, which to serve his purpose he termed Greenland, that he induced considerable numbers of his fellow-countrymen to colonize it. Ultimately two important centres were established, one of nearly 200 farms at "Osterbygd" and a second of half the size at "Vesterbygd" farther north. Both these districts were situated on the western coast, the eastern coast being apparently icebound. The hardy settlers in this Arctic climate found remains of a people similar to those met with in Vineland who were undoubtedly Eskimos. They penetrated along the coast to the far north, and a stone bearing a runic inscription has been discovered at 73° N. latitude.

Greenland was a stepping-stone to the Vikings' crowning achievement in exploration, the discovery of the continent of America, which was accomplished without the aid of the compass. According to the *Saga of Eric the Red* a certain Biarni Heriulfsson, while making a voyage from Iceland to Greenland, was driven out of his course to the south-west and sighted a new country. In spite of pressure from his crew he refused to explore it and sailed north-east to Greenland. Leif, the son of Eric, determined to follow up this information, and in 1002, setting out with thirty-five hardy Greenlanders, he skirted the forbidding coast of Labrador, which they named "The land of flat stone". They next reached the beautiful forests of Newfoundland, which they appropriately called "Woodland". Determined to continue their wonderful voyage, they finally reached a great river swarming with salmon, up which they sailed, and decided to winter on its banks. According to the *Saga*, "the amenities of the place were such, as it seemed to them, that no cattle need fodder there in winter. Day and night were more equally divided than in Greenland."[1] While exploring the new land they found grapes, and therefore called it Vineland. In the spring they loaded their ship with timber and grapes, which had presumably been dried, or may have been mountain cranberries. Thus laden they returned to Greenland after a most successful expedition. There has been much discussion as to which part of the coast of America should be identified with Vineland. A reference to an observation made by Leif on the shortest day and the general description of the climate tend to prove that his winter camp was in Maryland or Virginia.

[1] For this section *vide The Norse Discoverers of America*, by G. M. Cathorne-Hardy, 1921.

Leif's successful voyage caused much discussion, and his brother Thorvald decided to lead a second expedition to Vineland. They reached Leif's camp without difficulty, and in the spring they explored to the west and found "a fine wooded country, the trees coming down close to the sea. There were many islands." They saw no natives, but found a wooden barn. They again spent the winter at Leif's camp, and in the following spring explored to the east and north. On this expedition they saw three skin canoes and killed eight natives, while one escaped. They were soon attacked by hundreds of natives in their canoes. These were beaten off, but Thorvald was mortally wounded. There were other voyages, but the hostility of the natives ultimately drove the Norsemen from the country.

Fortunately the Saga-telling age, a remarkable period of intellectual activity, preserved the annals of these heroic voyages until they were enshrined in the *Saga* written by Ari the Learned, and this record enables us to pay homage to the superb achievements of the Vikings in the field of exploration.

From the Volga to the Atlantic Ocean and from Sicily to the Orkneys, every land in turn bowed before the warlike prowess of the stalwart Vikings, and every country which they conquered was ultimately strengthened by the infusion of vigorous northern blood.

CHAPTER VII

PILGRIMS AND CRUSADERS

"We are the Pilgrims, master; we shall go
Always a little further: it may be
Beyond that last blue mountain barred with snow,
Across that angry or that glimmering sea."
JAMES ELROY FLECKER, "*Hassan*".

"Must we then sheathe our still victorious sword;
Turn back our forward step, which ever trod
O'er foemen's necks the onward path of glory;
Unclasp the mail, which with a solemn vow,
In God's own house, we hung upon our shoulders;
That vow, as unaccomplish'd as the promise
Which village nurses make to still their children,
And after think no more of?"
The Crusader: A Tragedy.

PILGRIMAGE is an ancient institution, and plays an important part in most religions, the fundamental conception being that the residence of the god is holy ground and that a visit thereto ensures spiritual and material benefits.

From very early times a pilgrimage to sacred Benares, situated on the holy Ganges, where the Hindu is purified and where of all places he would choose to die, has attracted and still attracts millions. Buddhism also drew its pilgrims from remote China, and one of these, Hsuan-tsang, as we have seen, added materially to our knowledge of Asia by his epoch-making travels.

In ancient Christian literature there is no special call to pilgrimage, but visits to the land which the feet of the Redeemer trod commenced in the second century. Perhaps the earliest reference to this subject is found in the writings of Origen, who lived early in the third century, and who states that at Bethlehem the cave in which Christ was born and the manger in which He was laid, were shown to visitors. At this period Bethlehem and the Mount of Olives were the places specially visited. The site of the Holy Sepulchre had been covered over with the debris of a mound erected by the Romans when they besieged Jerusalem, but Constantine had the ground cleared, and his mother Helena, who undertook a pilgrimage

thither, not only built a church on the site, but is also credited with the discovery of the True Cross and of its nails, which were exhibited in her church. The earliest extant account of a pilgrimage was written in 333 by an unknown author who hailed from Bordeaux.

Of special interest to us is the pilgrimage of St. Willibald the West Saxon, probably the first Englishman to visit the Holy Land. He and his companions, early in the eighth century, started from Hamble Mouth in Southampton Water, with the original intention of proceeding no farther than Rome. But having decided "to reach and gaze upon the walls of that delectable and desirable city of Jerusalem", they travelled to Naples, Syracuse, across Southern Greece and so to Ephesus, whence they reached Cyprus, travelling most of the way by land. From the port of Tortosa in Syria they proceeded inland to Emesa, where they were arrested "as strangers and unknown men", and were taken before the Caliph, Yezid II. To his inquiry as to whence they came, they replied: "From the western shore, where the sun sets, and we know not of any land beyond—nothing but water." The Caliph exclaimed "They have done no wrong; set them free". St. Willibald died bishop of a Frankish see in 781, and we owe this interesting account of his pilgrimage to his biography written by a nun.

The great pilgrim route to Rome lay across the Alps by what is now the Pass of St. Bernard, but was then called *Mons Jovis* or Mount Joux, after a temple to Jupiter. Early in the tenth century this important pass was seized by a band of Saracens, who had established themselves at St. Tropez and had penetrated to the Alps. Among their first victims were French and English pilgrims, some of whom were killed. Indeed, the pilgrims suffered great hardships in those early days, and the percentage who never returned home must have been very high. But to go on pilgrimage became a fixed custom, as it remained until recently in Russia, and still is in Persia and other Moslem countries. As Chaucer wrote:

> "And smale foules maken melodie
> That slepen alle night with open eye,
> So priketh hem nature in hir corages;
> Than longen folk to gon on pilgrimages."

Pilgrimages to Palestine gradually increased until they were numbered by thousands, and we are told that some 6,000 pilgrims were transported annually by the ships of the Knights

of St. John and of the Temple sailing from Marseilles, and that many more sailed from Italy. As their numbers increased, hospices were gradually erected for their exclusive use. The oldest one in the Alps was built in the Septimer Pass and dates from Carolingian times, while that on the Great St. Bernard is the best known. According to recent information its Canons are contemplating the foundation of a hospice on the frontier of Tibet, where, no doubt, they will render valuable services to exploration, as did their predecessors the Jesuits, frequently referred to in this work.

Pilgrims at first brought back little information, being absorbed in their visits to shrines and in the quest of a bone of a Saint or even a little dust from a tomb. In this connection the bones of the martyrs were exported from the catacombs at Rome and formed a staple article of commerce. We know also the importance that Venice attached to securing the bones of St. Mark from Alexandria. But as the years passed, views widened, and beautiful tissues, tiles, spices and other products of the East reached Europe, while her knowledge of the geography of Asia and of North Africa benefited in proportion. Such were the men and women pilgrims who in increasing numbers visited the Holy Sepulchre, until in 1010 the mad Fatimite ruler of Egypt, Hakim Biamrillah, destroyed the buildings of the Holy Sepulchre, thereby stirring Christendom to its depths. From that time the Crusades became inevitable, although not for many years did these armed pilgrimages, as they may be called, actually begin.

It is not sufficiently realized that Byzantium rendered invaluable service to the cause of civilization down the ages. Had Moawiyah captured the city in the seventh century, or Sulayman in the eighth, it is probable that the Arabs would have conquered the greater part of Europe at a time when her peoples were utterly unprepared for organized resistance.

The Crusades in the eleventh century marked a turning-point for benighted Europe. In 1016 the Pisans wrested Sardinia from the Moslems, and in 1060 the Norman conquest of Sicily, an amazing feat of arms, began. Later in that century, in 1072, Leon and Castille were united under Alfonso VI, who captured Toledo in 1085. When he died in 1108, the Christians, aided by Crusaders bound for the Holy Land, gradually gained the upper hand. So far as Byzantium was concerned, the position was much less favourable. For over three centuries the Moslems had made no progress against the Greek empire in Asia, but the appearance

PILGRIMS SETTING OUT FROM EUROPE (*above*); AND PAYING TOLL ON LANDING IN PALESTINE (*below*)
(*From Harleian MSS. in British Museum*)

[*face p.* 60

of the Seljuk Turks revitalized Islam. Togril Beg, the founder of the dynasty, was invested by the Caliph as ruler of the East and the West at Baghdad, and continuing his victorious career came into contact with the armies of Byzantium.

An interesting story is told of the *Nizam-ul-Mulk*, the celebrated Vizier of the Seljuks, which illustrates the extent of the empire and his power of organization. On the occasion of the Seljuk army crossing the Oxus, he paid the ferrymen by bills on Antioch, which were readily cashed.

Alp Arslan, the successor of Toghril, decisively defeated a numerically superior Byzantine army in 1071, at the battle of Manzikert. In this campaign we find mention of a body of Normans commanded by Ursel of Balliol, a kinsman of the Scottish King, who had indeed travelled far from his native heath. The spoils of the victors included most of the Byzantine provinces in Asia Minor, which in 1077 were formed into a separate state by their governor, Sulayman, a member of the ruling dynasty, who made Nicaea his capital. This branch of the Seljuks was known as the Seljuks of Rum.[1]

The position of Alexius the Emperor was pitiable. He appealed to the Pope for help to recover his lost dominions, and in 1095 Urban II addressed a great audience at Clermont, telling them how the cries of threatened Constantinople and oppressed Jerusalem were ringing in his ears. The Pope's knowledge of geography was somewhat vague, for he said that it would take two months to traverse the lands which "the accursed Persian race" had won from the Empire of Byzantium. The assembly was deeply moved, and to a mighty shout of "*Deus vult! Deus vult!*" Urban launched the first Crusade. The appeal to mass enthusiasm was to redeem Jerusalem from the hands of the Saracens, who held the sacred soil that the Redeemer had trodden. The nobles were swayed by religious emotion, believing that death in action against the Paynims would gain them Heaven. They also no doubt hoped to carve out principalities or baronies for themselves, while thirst for honourable distinction on the field of battle was a very strong inducement among the knights.

The Venetians, Genoese, and men of other Italian states benefited enormously by the transport and victualling of the Crusaders, and generally supported the movement, although they were always equally ready to trade with the Saracens. From the point of view of the individual the movement was

[1] The Byzantine Empire was also known in the East as Rum, the word being a form of Rome.

the greatest manifestation of the pilgrim spirit. It was also of the highest value in teaching Europe geography, as in our own days was the Great War. Moreover, it strengthened the sea-power of Christendom. On the other hand the Crusaders, who never co-operated cordially with the Byzantine Emperors, in 1204 attacked and sacked Constantinople, the capital of the state they had sworn to save, while the powers of Europe never united to ensure the success of the sacred task to which they had solemnly pledged themselves.

The first Crusade was led by Duke Robert of Normandy and other experienced warriors. Indeed the Normans, recent converts to Christianity, constituted the steel head of the lance, just as the Seljuk Turks, recent converts to Islam, were their chief opponents in Asia Minor. The Crusaders assembled at Constantinople in 1097, and, crossing the Bosphorus, laid siege to Nicaea, which they captured. They decisively defeated Kilij Arslan, son of Sulayman, at Dorylaeum, and though he destroyed their supplies as far as possible, they marched across Asia Minor, suffering severe privations by the way. In October 1097 they besieged Antioch, which was captured after extraordinary vicissitudes of fortune. Two years later Jerusalem was stormed, its capture being followed by a deplorable massacre of its inhabitants, Moslems and Jews. As the result of this Crusade, Godfrey de Bouillon was elected "Defender of the Holy Sepulchre"—he refused the title of King—and held Jerusalem and Jaffa with less than 4,000 fighting men.

Three other Latin states were established; Edessa, with its Armenian population, Antioch and Tripolis. In addition, various provinces of Asia Minor were recovered for the Byzantine Empire, mainly owing to the fact that the Seljuks were engaged in fighting among themselves after the death of Malik Shah in 1092, and that the Fatimids were weak at this period. The Crusaders were thus allowed to organize their conquests in peace, and a halo of glory surrounds the first Crusade, which constituted a sign that Christendom was awakening.

A generation later the situation had changed. The enemies of the Crusaders were the Seljuks of Asia Minor, already mentioned, the *Atabegs* of Mosul and the Fatimids of Egypt. In 1127 the Turk Zangi became *Atabeg* of Mosul, and in 1144 he captured Edessa. This disaster once more moved Europe and led to the second Crusade. The Emperor Conrad was first in the field, but his powerful army was cut to pieces;

and the French under Louis VII of France fared little better. Consequently the second Crusade was a complete failure, but most fortunately the fall of Edessa was not followed up, as Zangi died shortly afterwards.

Nur-ud-Din his successor sent a force under his general Shirkuh to Egypt, and this ultimately resulted in the general's nephew Salar-ud-Din, the great Saladin, succeeding him as virtual ruler of Egypt. Upon the death of Nur-ud-Din Saladin made himself master of Syria, and concentrated his remarkable abilities on the overthrow of the Latin kingdom. In 1187, at the battle of Hattin, he decisively defeated Guy, King of Jerusalem, whose capital fell a few months later.

Again Europe was stirred, and the third Crusade was organized. Frederick Barbarossa was making a successful march across Asia Minor when he was drowned and his army melted away. Richard Cœur de Lion and Philip of France landed in Palestine in 1191 and captured Acre, after which success Philip, followed by his French knights, returned home. Cœur de Lion remained in Palestine and won deathless fame throughout Europe and the Moslem world, but lack of union and jealousies were too strong, while the sinews of war, gained from the spice trade, weighed down the scales on the side of the Moslems. Finally he was obliged to forgo the hope of reconquering Jerusalem for the Christians. Saladin, a worthy foeman of Cœur de Lion, granted the Crusaders liberal terms, leaving certain ports to them and guaranteeing free access to the Holy Sepulchre.

In the thirteenth century Egypt, which had become the centre of Moslem power, was the objective of more than one Crusade, culminating in that of St. Louis, who, after the capture of Damietta in 1249, was routed and taken prisoner by the Mamelukes of Egypt.

The Crusades practically ended with the expedition against Tunis, in which St. Louis died. But Prince Edward of England, afterwards King Edward I, led a small English force to Palestine. A few years after his departure from the Holy Land in 1272, the Latin states were finally overthrown.

It is a matter of extreme difficulty to estimate the exact results of the Crusades. There is, however, no question as to the immense advance in exploration to which they gave rise. Partly as the result of the far-reaching trade relations that were established, but still more owing to the missions which were an accompaniment of the Crusades, European knowledge of the Near East and of Egypt was much widened,

not only by the voyages of tens of thousands of pilgrims and crusaders, but also by the books that were published, notably Jean de Joinville's *Life of St. Louis* and the history of William of Tyre. Of still greater importance, from the point of view of exploration, was the knowledge of Central Asia gained by the journey of John Plano de Carpini, who was despatched by Pope Innocent IV to the court of the *Kaan* or Great Khan at Karakoram in 1245; and William of Rubruquis, who was sent out by St. Louis in 1253, also visited the court of the *Kaan* at Karakoram. These journeys, whose great importance is evident, will be described in Chapter VIII.

As to the effect of the Crusades on the civilization of Europe, surely the fact that hundreds of thousands of men and thousands of women of all nations and of all classes were brought into contact with new people, saw new and wonderful things, encountered new ideas, and in some cases learnt an Oriental language or met with educated Saracens, can hardly be over-estimated. New plants, new fruits, such as lemons, apricots and melons, new manufactures, such as cotton, muslin, and damask came into use, and new words, such as cotton, satin, sofa, tariff, arsenal, admiral and magazine were introduced into Europe. Nor must we forget the great influence that the East exerted on European art, as in the case of the beautiful glass of Venice, the secret of which was learned in Tyre. The list is a long one; for example, at Bokhara some twenty years ago I saw silver kettledrums on the horses of the mounted band of exactly the same pattern as those used in British Cavalry regiments. Even the hoods at Oxford and Cambridge are derived from the scarves of honour which the Caliphs awarded to learned men.

As to the question of sea-power, in which Europe ultimately found salvation from the Moslem menace, the Crusaders poured untold wealth into the states of Venice, Genoa and Pisa, which increased their fleets to meet the demand for the transport of pilgrims, armed and unarmed, and for the commerce fostered by the creation of the Latin states. Simultaneously there was improvement in sea-training, in shipbuilding and in the *portolani* or medieval sailing-charts, which led to the rediscovery of the Canary Islands in 1270 and to a Genoese expedition to the west coast of Africa some years later.

In London, the church of the Knights of the Temple, built in a circular form reminiscent of the church of the Holy Sepulchre, and consecrated in 1185 by the Patriarch of Jeru-

salem, constitutes a tangible link with the English Crusaders, whose armour-clad effigies carry us back to the days of Cœur de Lion.

"The Crusades", writes Beazley, "are the central expression of Christian revival, and were entirely successful in kindling a spirit of patriotism and boundless enterprise, whereby our Western World finally attained to the discovery, conquest, colonization or trade-dominion of the best portions of the world."

CHAPTER VIII

MARCO POLO CROSSES ASIA

> "I will go on the slightest errand now to the Antipodes that you can devise to send me on; I will fetch you a tooth-picker now from the furthest inch of Asia; bring you the length of Prester John's foot; fetch you a hair off the great Cham's beard."
>
> SHAKESPEARE, "*Much Ado about Nothing*," *Act III, Sc.* 1.

WE have now reached one of the greatest periods of exploration, but before dealing with it the stage must be set, and mention made of the forerunners of the illustrious Marco Polo.

Early in the thirteenth century a young Mongol chief fought his way to a position of supremacy, and, in 1206, assumed the title of Chengiz Khan. Campaign followed campaign in China, which was ever the main objective, but, in 1219, Chengiz decided to march west and conquered Central Asia, Persia and Russia. He died in 1227, but under the rule of his successor Ogotay the Mongols continued their conquests in Persia and raided Armenia and Syria. So far-reaching were these raids that, in 1244, they sacked Jerusalem and cut to pieces a force of Crusaders near Gaza. In Europe, under Batu, they advanced across Russia and devastated Poland and Hungary, while Germany lay at their mercy. Indeed, so widespread was the terror they inspired, that in 1238, to quote Matthew of Paris, "the people of Gottland and Friesland did not dare to visit Yarmouth for the herring fishery".

The death of Ogotay saved Central Europe, as the Mongols suddenly withdrew to attend the Diet for the election of his successor; but they riveted their hold on Russia for two centuries. In 1258, Hulaku Khan captured Baghdad, massacring its inhabitants and killing the Caliph. He dealt thereby a staggering blow to Moslem civilization, but the Mamelukes of Egypt defeated the Mongol invaders, and saved this important centre of Moslem culture. The western limits of the Mongol Empire in Asia were fixed by this defeat.

In Europe, upon the retirement of the invaders, the fears

that they had inspired began to give place to hopes that they might destroy the Moslems. There were also rumours as to the existence of Christian tribes among these savage horsemen, which were not without foundation.

In 1245, Innocent IV decided to despatch an embassy to the *Kaan*, to gain information as to the actual situation in Mongolia and to call on the ruler to adopt the Christian religion. John Plano de Carpini, a Franciscan monk, was selected for this dangerous task. Accompanied by Friar Benedict, a Pole, who was appointed to act as interpreter, he reached Batu's headquarters on the Volga. After some delay they started off on a post ride of 100 days, travelling day and night and suffering terribly from fatigue and hunger. However, their courage carried them through, and Carpini finally reached the Mongol camp near Karakoram at a time when a Diet was in session for the election of a successor to Ogotay.

Carpini gives an interesting account of the proclamation of Kuyuk at the Golden Orda. Two of Kuyuk's ministers were Christians, and so Carpini was well received by the *Kaan*, whom he describes as "very wise and politike, and passing serious and grave in all his demeanour".[1] Carpini also considered that he was inclined to the Christian doctrine, but failed to win him as a convert. Letters to the Pope were given to the Franciscan, who, ignoring a suggestion that he should be accompanied by a Mongol envoy, set out on his long return journey. Carpini died shortly after his return to Europe, but the information he gave the Pope was of the greatest value, and proved that the Mongols were determined to wage war on Christendom. His descriptions of the countries he passed through and of the people he met are admirable.

We next come to the mission of William de Rubruquis, a Flemish monk, who was despatched by St. Louis to gain information as to the Christian tendencies of the Tartars. Like Carpini he was well treated, but suffered terribly from fatigue and hunger on the journey to Karakoram, where he found that Mangu was the *Kaan*. He was received kindly, and granted more than one audience, but Mangu, who was always half-drunk, never committed himself to an acknowledgment of his conversion to Christianity. Rubruquis met various Nestorian Christians, but, possibly from professional jealousy, could find nothing good to say of them. Perhaps the most important statement made by him related to: "Great Cathaya,

[1] *The Texts of John Plano de Carpini and William de Rubruquis*, edited by C. Raymond Beazley (Hakluyt Society, 1903).

the inhabitants whereof (as I suppose) were of old time called Seres." It is of interest to note that Roger Bacon not only "diligently read this book", but talked with its author.

A third traveller of this period was Hayton I, King of Little Armenia, who had realized the power of the Mongols and had wisely submitted to them. In 1254 he proceeded to Karakoram to secure his position with Mangu. Hayton travelled by the famous Darband Pass on the west coast of the Caspian, and thence made for the Volga. He reached Karakoram by a route considerably to the north of that followed by the two Friars, and was received with honour by Mangu. On his return journey he passed through Otrar, Samarkand, Bokhara and Khorasan to Tabriz. Hayton related many wonderful things he had seen, and still more wonderful things he had heard.

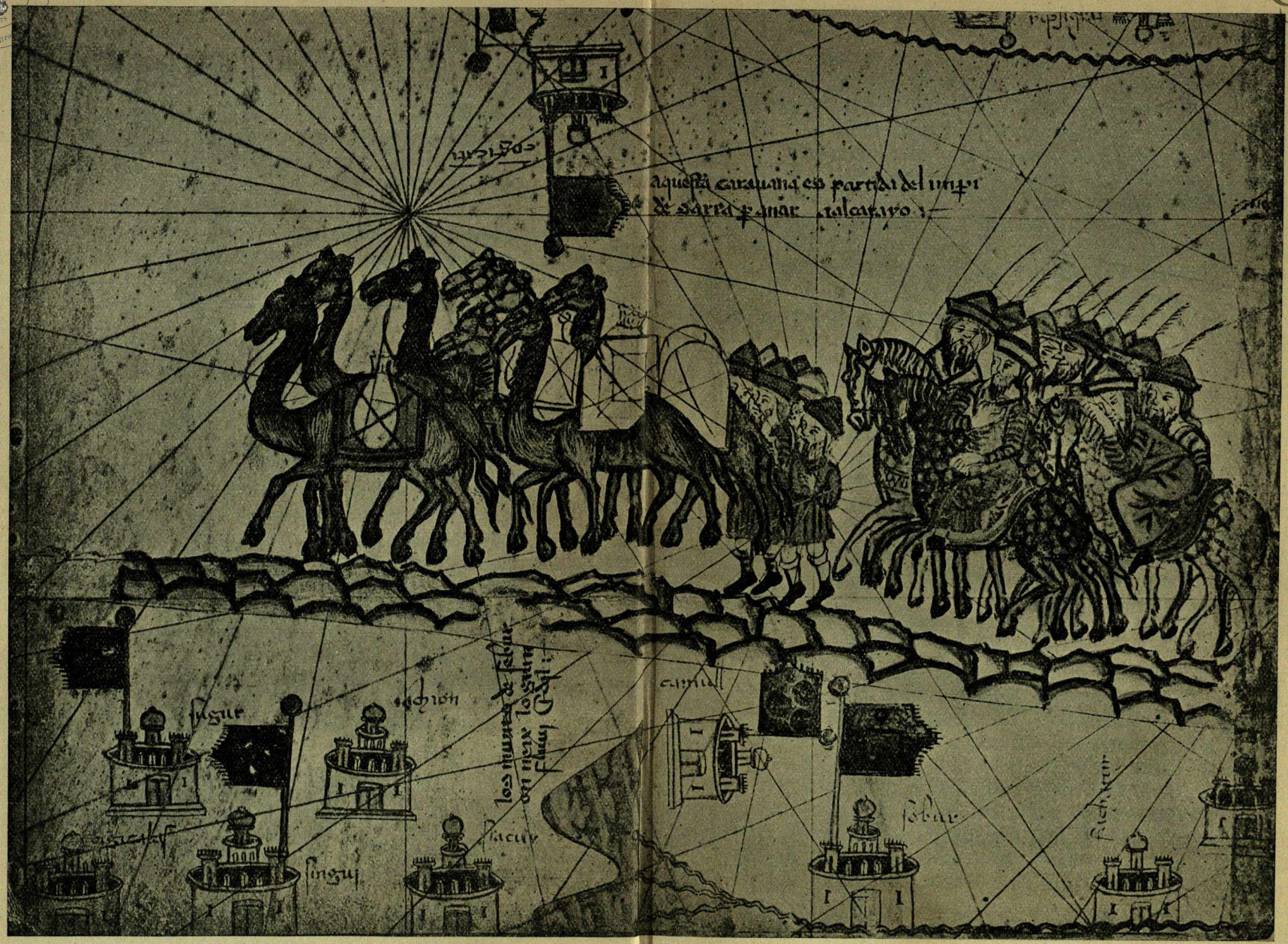
Much credit is due to these three travellers, who visited the Mongol *Kaans* while they were still leading their nomad existence and give us a vivid picture of a life that was shortly to change to that of monarchs inhabiting magnificent palaces in China.

The story of the exploration of Asia by Nicolo Polo, his brother Maffeo, and Nicolo's son Marco, begins in 1260.[1] The vast empire of the Mongols acknowledged the supremacy of Kublai, who was elected *Kaan* in this very year, and removed the capital to Khan-baliq, the Cambaluc of Marco Polo, situated close to Peking, thereby founding a Chinese dynasty. In this year the two Polos were at Constantinople, and decided to cross the Greater Sea, as it was called, to Soldaia, situated to the west of Kaffa, where the family owned a house and had carried on business for two generations as jewellers. They decided to visit the court of Barka *Khan* at Sarai, the scene of Chaucer's *Cambynskan*, as he named Chengiz Khan.

> "At Sarra, in the Londe of Tartarie,
> There dwelt a Kyng that werriëd Russie,
> Thurgh which ther deyede many a doughty man,
> This nobil Kyng was cleped Cambynskan."

The Venetians were well received by Barka, to whom, in accordance with the custom of the country, they presented their entire stock of jewels. Barka accepted them, and "had twice their value given to the brothers".

[1] I have consulted Yule's classic, *The Travels of Marco Polo*, as revised by Henri Cordier, 1903, and Professor Benedetto's remarkable *Marco Polo* (Broadway Travellers Series, 1931). The noble eulogy on the great Venetian explorer is by Yule, but other quotations are taken from Benedetto. I would thank Messrs. Murray for permission to quote from Yule's work.



A detail of the celebrated *Atlas Catalan de la Bibliothèque Nationale de Paris*, depicting the Polo brothers starting on their great journey. The inscription above their heads runs : " This caravan has started from the Empire of Sarra to proceed to Cathay ". The range running across the middle of the illustration is described as " The mountains of Siberia, in which the Edil (Volga) takes its source ". At the bottom of the illustration the three sources of the Volga are shown. Sobur is Sibir, the capture of which by Yermak is mentioned in Chapter XIX. Carmul is Hami in Chinese Turkestan ; the other cities cannot be definitely identified.

[*face p.* 68

The Polos had spent a year at Sarai when hostilities broke out with Hulaku, the captor of Baghdad, who is called Alau. In consequence of this, realizing that they could not retrace their steps owing to the disturbed state of the country, they determined to go eastwards "hoping to return by an indirect route". Descending the Volga, which they called the Tigris, they travelled across the desert to Bokhara, described as "a very noble and large city", as indeed it still was in the year before the Great War. The Polos remained at Bokhara for three years, seeking in vain to return home, when an envoy from Hulaku, bound for the court of the *Kaan*, appeared on the scene. Knowing that Kublai had never seen any "Latins", he persuaded the two Venetians to accompany him to Cambaluc, where the *Kaan* received them most kindly. He was deeply interested in the information they gave him "concerning the Lord Pope and all the customs of the Latins", and decided to send them back to Europe with letters to the Pope, in which he begged His Holiness to send him "some hundred wise men, learned in the law of Christ and conversant with the Seven Arts", to preach to his people. He also "bade the two brothers bring him some oil from the lamp that burns near God's sepulchre in Jerusalem". The Polos "toiled three years on the way" and finally, in 1269, reached Acre *via* the port of Ayas. There they found that the Pope had died, and on the advice of "a wise clerk who was Legate of the Church of Rome for the whole kingdom of Egypt" they returned to Venice, pending the election of a new Pontiff.

Two years later, "seeing that no new Pope had been chosen, they thought they ought not to delay any longer in returning to the *Kaan*. So they departed from Venice, taking with them the boy Marco, who was seventeen years of age. Before the party left the port of Ayas, the Legate had been elected Pope, and summoned them to return to Acre, where he furnished them with letters and "many splendid gifts" for the *Kaan*, while they had taken care to secure a flask of the sacred oil. The Pope also decided to send two preaching friars with the Polos, but unfortunately they feared to undertake the journey and turned back from Ayas. Had they been men of the stamp of Carpini or Rubruquis, they might well have converted Kublai and the Mongols to Christianity. No such opportunity as the invitation of the *Kaan* had ever been afforded, and the ignominious failure to take advantage of it is to be regretted.

Marco Polo begins his great work with an account of Lesser

Armenia, in which Ayas was situated. He next describes Greater Armenia, referring to Mount Ararat, and follows this up with a description of Georgia. He mentions the Caspian Sea, and states that the Euphrates, the Tigris and the Jon (the Jihon or Oxus) flow into it. He rounds off his account of this part of Asia with a short description of Baudas, as he calls Baghdad, and tells the story of the Caliph and Hulaku, an account which surely inspired Longfellow's "Kambalu".

We are faced with the problem of deciding which route the Venetians followed, as, until they leave Yezd, no definite description of the way is given. Yule decided in favour of an itinerary which ran northwards through Arzinjan and then swung southwards to Mosul and Baghdad. Thence he led the Polos down the Tigris and the Shatt-al-Arab to Basra; from Basra to the island of Kisi (Keis), and so to Hormuz.

I am convinced that Yule was mistaken, as I do not believe that Marco visited Baghdad, nor that he descended the Tigris to the Persian Gulf.[1]

Marco almost certainly makes his survey of Persia from Tabriz, at which place he starts dealing with that country, but, with the typical medieval mind, he could not refrain from harking back to Baudas and telling his readers of a miracle there, returning afterwards to Tabriz and describing Persia from the geographical and commercial point of view.

Of Tabriz he writes that "the city is excellently situated, so that wares are brought thither from India, Baudas, Mosul and Cormus (Hormuz) and from many other regions besides. . . . One can also buy there precious stones, of which there is great abundance." After Tabriz, which is described as being in Iraq, the first city to be mentioned in Persia is Saveh, which, owing to the resemblance of its name to Sheba,[2] is stated to have been the home of the three Magi. He also visited the Cala Ataperistan, which signifies "the Fort of the Fireworshippers", where he heard a legend of a miracle which obviously dated from the days of the ancient Zoroastrian religion.

There is no doubt that the Polos travelled along the main caravan route to Kazvin, which is mentioned as the first of the eight kingdoms into which Persia is divided, and thence

[1] The question is fully discussed in my *Ten Thousand Miles in Persia* and in the Cordier edition of Yule's great work. Sir Raymond Beazley, in *The Dawn of Modern Geography*, Vol. III, p. 49, accepts my views.

[2] Cp. Isaiah lx. 6; "The multitude of camels shall cover thee, the dromedaries of Midian and Ephah; all they from Sheba shall come: they shall bring gold and incense."

THE ITINERARIES OF MARCO POLO

(From *The Most Noble and Famous Travels of Marco Polo*, by N. M. Penzer. By permission of the Argonaut Press)

[face p. 70

KUBLAI GIVES THE GOLDEN TABLET (PAÏZAH) TO THE BROTHERS POLO
(*B.M. Royal Manuscript* 19, *D. I., fol.* 59(*b*))

[*face p.* 70

to Sava and Kashan and so to Yezd, where reference is made to the silk manufactures for which the city is still noted.

We then come to the first detailed description of the route, which runs as follows: "When one leaves this region to journey further, one travels for seven days over plains. . . . There are many fine palm-groves, which one can ride through. . . . There are also very fine wild asses. At the end of seven days' journey one reaches a kingdom called Kirman." This account furnishes a striking proof of the accuracy of Marco Polo. There are two routes connecting Yezd and Kirman. The eastern route lies throughout at an altitude of between four and five thousand feet, where date palms could not grow. On the western route, however, at Bafq, there are extensive palm groves. There I have crossed a salt stream at the lower altitude of 3,100 feet, and, looking northwards, seen a wide salt expanse, the home of the *gur-i-khar* or wild ass.

At Kirman, Marco describes the embroideries for which the city is still noted, in which connection the celebrated shawls of Kashmir drew their models from the *shal* of Kirman. At the time of the Venetians' first visit, the province was ruled by an energetic lady named Turkan Khatun, and the most noticeable building was the *Kuba-i-Sabz* or "Green Dome", erected by her family, which was still standing in 1895. It collapsed a year or two later.

The onward journey to the coast is again described as riding for seven days over a plain in bitter cold when "one reaches a very great mountain. After that begins a great descent . . . after which one comes to a very vast plain, at the beginning of which stands a city called Camadi". In tracing this section of the journey the first necessity is to identify Camadi. In a *History of the Seljuks of Kirman*, the Persian text of which was published some years ago, we read that "Komadin was a suburb at the gate of Jiruft, a resort of strangers from Turkey and Hind, and a meeting place of travellers by sea and land." In 1894 I examined the site, covered by thousands of kiln-burnt bricks, which the natives are too indolent to utilize, contenting themselves with booths made of boughs, or living as nomads in black tents. I also made a small collection of seals and coins. In 1895, I undertook a journey to survey the unexplored district of Sardu, which I discovered to be a very high-lying plateau terminating in the Sarbizan pass. From this pass, situated at an elevation of 9,000 feet, there is a very steep descent of some thirty miles *via* Dilfard to the Jiruft Valley, in which lie the ruins

of Komadin, and this was undoubtedly the route followed by the Polos.

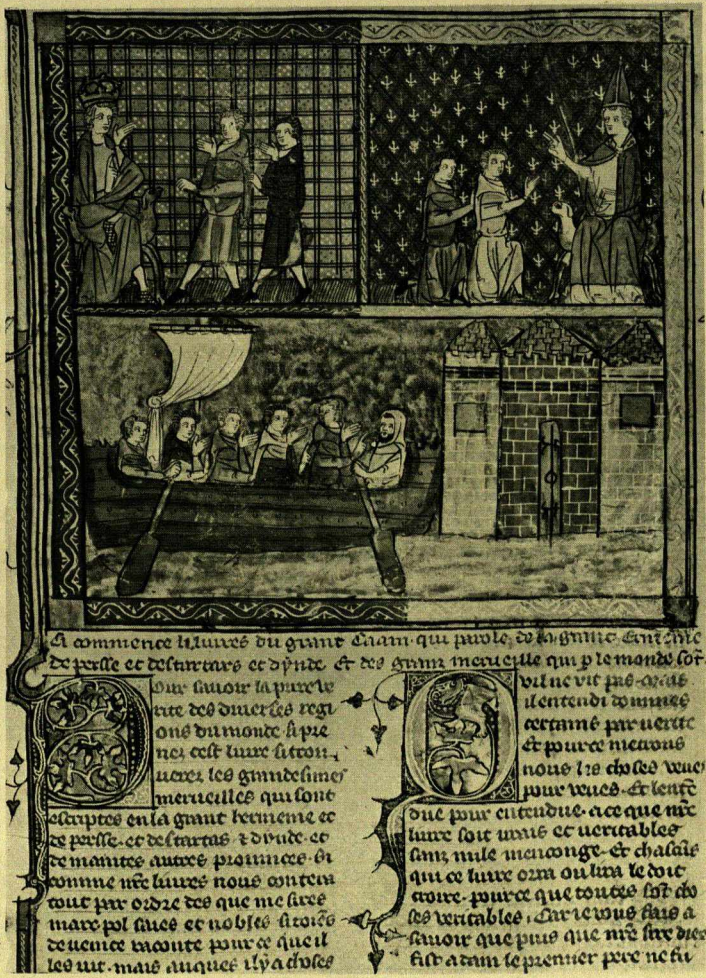
From Camadi the travellers descended the valley of the Halil Rud to the district of Reobar (Rudbar) where, as mentioned in Chapter II, Alexander the Great founded an Alexandria at Gulashkird. It was in this valley that Marco Polo crossed the route of his mighty predecessor. The onward journey to the coast lay down the Duzdi or "Robber" River, which I found, like Marco, to be "exceedingly bad and infested by robbers". Indeed, we came on a caravan that had been looted on the previous day, and saw the cairn of stones which covered a camel-driver who had been killed.

The port of Hormuz was situated on the Minab River, the classical Anamis, where Nearchus beached his ships. Marco describes it as a great trade centre for "spices, precious stones, pearls, gold and silver cloths, elephants' teeth, and many other wares".

Presumably the season for navigation was past, or else the Polos decided that "the very bad ships, which are not put together with iron, but sewn with twine", were unsafe. In any case they turned their backs on Hormuz, returned to Kirman by a more westerly route, and then rode northwards to Cobinan or Kuhbanan, where "they make *tutia* (antimony) which is very good for the eyes". In this connection may be quoted the Persian proverb: "The dust of a flock of sheep is *tutia* to the eyes of a hungry wolf."

The Polos had now reached the southern edge of the great desert of Persia, which constitutes its "dead heart", and stretches for some 800 miles from the vicinity of Teheran to Baluchistan. Its width varies, and may average two to three hundred miles. It is the manifestation in an extreme form of the general aridity of Persia, itself surrounded by arid countries. To quote Marco's description: "One rides no less than eight days across a very arid desert, without fruits or trees." Of the water he says: "It is so bitter that no one could possibly drink it; a single drop of it will purge a man violently." I believe myself to have been the first European to cross this desert in modern times by the same route as Marco Polo followed *via* Naiband and Duhuk,[1] and I can fully endorse his description. The trail is marked by dead animals and occasionally by corpses of travellers. Without a sign of bird or animal, it is indeed a land of death. The

[1] *Ten Thousand Miles in Persia*, p. 34 *et seq.* In the itinerary map Marco's route is shown as running through Tabas, but I do not accept this alignment.



MINIATURE IN THREE COMPARTMENTS

(*a*) The Emperor Baldwin and the Brothers Niccolo and Matteo Polo in Constantinople
(*b*) The Brothers Polo before the Legate Tebaldo de Vicenza
(*c*) The Brothers Polo set sail for the Black Sea

(*B.M. Royal Manuscript* 19, *D. I., fol.* 58(*a*))

[*face p.* 72

Venetians fortunately escaped the "poison wind", and also a storm that might have obliterated the track, and duly arrived at Tunocain—which signifies the two adjacent districts of Tun and Kain.

Marco at this point pauses to give an interesting account of the Assassins, his probable reason being that Hulaku had started his campaign for the extirpation of this sect at Tun some ten years previously.

From Tun the onward journey led north-east to Shiburghan —probably through ruined Herat—and thence to Balkh, the Bactra of Alexander and of Milton. This famous city had also been destroyed by the Mongols, who, on the pretence of counting its inhabitants, collected and then massacred them. Following up the valley of the Oxus in the footsteps of Hsuan-tsang, Marco gives an interesting account of Balashan (now Badakshan) and states that "the royal line descends from King Alexander . . . and their kings call themselves Zulcarnein".[1] Marco refers to the Balas rubies which "are born in this country", and, indeed, are still called after it. Better known is "the finest and best azure in the world", the beautiful lapis lazuli, which was used by the goldsmiths of Ur in the fourth millennium B.C. The horses of Badakshan also are well bred and full of spirit.

The Polos spent a whole year in Badakshan, owing to Marco's illness, which he shook off only by visiting one of their mountains, "on the summit of which are broad plateaux, rich in grass and trees". After Badakshan, he mentions Vocan or Wakhan, and proceeds: "One ascends so high that they say it is the highest place in the world. On reaching these heights, one finds a plain between the mountains, with a great lake, whence issues a very fine river. . . . There is an enormous number of wild sheep of very great size. Their horns reach a length of quite six spans. . . . To cross this plain one rides no less than twelve days. It is called Pamier."

Marco Polo was a true sportsman, as is proved time and again in his book, and when Wood, whose important journey is referred to in Chapter XXVIII, first brought specimens of these wonderful rams to England, the species was rightly named *Ovis Poli*.[2] For many years of my life, my chief ambition was to tread the Pamirs in the footsteps of Marco Polo and to shoot an *Ovis Poli*, and on no expedition that I have made does the golden haze of reminiscence lie more brightly than

[1] For Zulcarnein or Zulkarnain *vide* Chap. II, p. 14.
[2] The Royal Central Asian Society has recently adopted the *Ovis Pol* as its crest.

that on which I successfully stalked these mighty rams in the remote upland valleys of "The Roof of the World". To quote the stirring verse of Kipling:

"Do you know the world's white roof-tree—do you know that windy rift
Where the baffling mountain-eddies chop and change?
Do you know the long day's patience, belly-down on frozen drift,
While the head of heads is feeding out of range?
It is there that I am going, where the boulders and the snow lie,
With a trusty nimble tracker that I know,
I have sworn an oath, to keep it on the horns of Ovis Poli,
And the Red Gods call me out and I must go!"

Marco reached the level plains with their large cultivated oases at Cascar or Kashgar, where he refers appreciatively to the splendid gardens and vineyards and fine farms. These must have offered a pleasing contrast to the Pamirs, where there is no cultivation, and where the Kirghiz consider a loaf of bread as a delicacy. He mentions the existence of a few Nestorian Christians. When I was residing at Kashgar, I tried to find out whether any custom that recalled Christianity was extant, and I was told that if a horse were not sold at a fair, the owner made the sign of the cross on its forehead to prevent its luck being spoilt.

From Kashgar the onward route lay through Yarkand, also a very fertile oasis, where Marco mentions the prevalence of goitre, still most distressing to-day. From Yarkand, crossing a bay of the desert which occupies the entire heart of the country, he reached Khotan. He makes no mention of the superb Kuen Lun range, which seems rather surprising. But when following in the footsteps of the illustrious Venetian, I realized that the atmosphere was seldom clear, and that it was only after a rare rainstorm that the snow-peaks appeared.

Khotan signifies the Kingdom of Jade, and still contains the pits dug in the dry river-bed, whence these valuable stones are "fished". Marco, however, possibly by a lapse of memory, refers to jade in connection with Pem, which is believed to be Keryia, the next oasis to be reached by travellers bound for China. Then came Charchan, which still retains its name, and finally Lop, "which is a large city on the border of the Great Desert". Sir Aurel Stein, our great authority on this part of Asia, who followed the route of Marco Polo across the Gobi, decided that at Charklik "he had indeed reached Lop".[1]

[1] Vide *Ruins of Desert Cathay*, Vol. I, p. 336 *et seq.*

The Great Desert "where the width is least, is a month's journey. In all there are about twenty-eight places with water, and one must ride a day and a night to find water, which in three or four places is brackish and bitter, but elsewhere it is good." The Venetians reached the city of Sachin (Suhchan) in the province of Kansi, which they called Tangut, in safety, and Stein bears testimony to the remarkable accuracy of Marco's description. He surveyed the distance from "Lop", across the Gobi, making it 380 miles, which is considered by traders as twenty-eight stages.[1]

The Venetians had now reached China proper, after having "toiled no less than three and a half years on the way, and the *Kaan* sent messengers to meet them at the distance of forty days' journey". They heard that he was at his summer palace of Chandu, and upon their arrival, the three travellers paid their respects to Kublai and "presented the credentials and letters of the Pope, which pleased him exceedingly. They then handed over the holy oil, at which he rejoiced mightily, setting great store by it." Thus the Polos reached China, in the case of the two elder traversing the entire length of Asia for the third time, and, after an absence of some nine years, were warmly welcomed by the *Kaan*.

[1] *op. cit.*, p. 519.

CHAPTER IX

THE EXPLORATIONS OF MARCO POLO IN THE FAR EAST

"—I am become a name
For always roaming with a hungry heart.
Much have I seen and known; cities of men,
And manners, climates, councils, governments,
Myself not least, but honoured of them all."

TENNYSON, "*Ulysses*".

MARCO POLO attracted Kublai's attention from the first, and set to work to learn "the customs, languages and manners of writing of the Tartars". He was consequently not only in close touch with the Court, but was employed on mission after mission by the *Kaan*, during which he explored far and wide, gaining more accurate information than any unofficial traveller could possibly have done. At the same time he, generally speaking, took the Mongol point of view, and failed to study the Chinese as deeply as might have been expected.

Marco Polo's description of the palace of Chandu runs: "This palace on one side is bounded by the city wall, and from that point another wall runs out, enclosing a space of no less than sixteen miles, with numerous springs and rivers and meadows." This account of Marco's was read by Coleridge, who fell asleep and dreamed:

"In Xanadu did Kubla Khan
A stately pleasure-dome decree,
Where Alph, the sacred River, ran
Through caverns measureless to man
Down to a sunless sea.
So twice five miles of fertile ground
With walls and towers were girdled round:
And there were gardens bright with sinuous rills
Where blossomed many an incense-bearing tree;
And here were forests ancient as the hills,
Enfolding sunny spots of greenery."

It was, however, by Marco's description of the winter palace at Cambaluc that the power and wealth of the *Kaan* were revealed to Europe.

"There is a great square wall with sides a mile long. In each corner stands a most beautiful and rich palace. . . . Further, in the middle of each side is another palace similar to those in the corners . . . and all eight palaces are full of war-equipment. Within this wall is another wall. Round it, also, are placed eight palaces, in which likewise war-harness is kept. In the middle of these circuits of walls rises the palace, the largest that was ever seen. It has no upper floor, but the basement is ten palms higher than the ground surrounding it, and the roof is surpassingly high. The inside walls are covered with gold and silver, and on them are painted beautiful pictures of ladies and knights and dragons and beasts and birds. The great hall is so vast that quite 6,000 men could banquet there. The beauty and size are so great that no one on earth could have built it better. The roof is varnished in vermilion, green, blue, yellow and all other colours, so that it glistens like crystal. Moreover, behind the palace there are great houses and halls where the treasures are kept and where his ladies and concubines live."

The palace opened on to a beautiful park well stocked with game.

At the feasts the guests were numbered by the thousand, and each pair of guests "had a golden cup with a handle, and with it he draws his drink from the large golden vessel, one of which is placed on the table for every two guests".

"On their New Year's Day, which comes in February, they all dress in white,[1] and all his subjects send the *Kaan* great gifts of gold, and silver and pearls and precious stones. . . . More than 100,000 splendid white horses are given to the *Kaan*. On that day his elephants, which amount to no less than 5,000, all covered with fine cloths, and each bearing two surpassingly beautiful coffers full of the Lord's plate, . . . and an immense number of camels, also covered with rich cloths, and loaded with the things necessary for this feast, file past the *Kaan*."

Marco gives a detailed account of the use of paper money by the Mongols, beginning with a description of the paper, which was manufactured from the "thin layer of the skin that lies between the bark and the trunk of the mulberry trees".[2] Paper money originated under the Tang dynasty, but the use of it was greatly extended by the Mongols. According to Marco, the *Kaan* bought up all the gold and jewels in the country with paper money, and the army was paid with it. He concludes: "All the princes in the world do not together possess the wealth of the *Kaan*." No wonder the Venetians gave Marco the sobriquet of *Il Milione*!

[1] White is the dominant colour in the rejoicings at the Persian New Year, but it is the colour of mourning in China.

[2] Similar paper is made to-day at Guma in Chinese Turkestan. Vide *Through Deserts and Oases of Central Asia*, p. 198.

Marco's first mission was to distant Carajan or Yunnan, to the south-west, and he was four months on the road. Some ten miles from Cambaluc, he crossed the San-Kan River, and described Pulisanghin with its beautiful marble bridge. Everywhere on the way to the city of Taiwanfu (T'ai-yuan) "one comes across many fine cities and towns, with much trade and industry, beautiful fields and splendid vineyards".

The great River Caramoran—the Hwang-Ho or "Yellow River"—is "so wide that there is no bridge that can span it . . . Along the river there are numerous cities and towns, with many merchants and thriving trade."

Of Kenjanfu, the province of Shan-si, Marco writes: "They have great quantities of silk. Gold and silk cloths of all kinds are made there. They have all the necessaries of life in great abundance and very cheap."

The mountainous province of Cuncun (Han-chung) is next traversed, and Marco refers with keen interest to the wonderful sport—"lions, bears, lynxes, fallow-deer, roes, stags and many more". After riding for twenty days "through mountains and valleys", Marco reached level country in the province of Acbaluc Manji or the "White City on the border of Manji". Again mountains are entered and traversed for another twenty days to the province of Sindufu or Cheng-tu-fu. The capital of the same name is situated on tributaries of the "Kiansui, which flows into the Ocean sea, at a distance of some eighty or a hundred days' journey. There is much shipping on it, such a number of ships as no one who has not seen them could ever credit. So big is the river, that you would rather think it a sea than a river." Here again we have a definite fixed point, for Cheng-tu is the capital of Ssu-chwan, and the great river is the celebrated Yang-tze-kiang, or Yangtze.

From fertile Ssu-chuan Marco continued his long journey, crossing a province of Tibet which he found devastated. "During all those twenty days' journey one finds no hostelries nor any supplies, except perhaps every three or four days." He refers to the coral necklaces "hung as a token of great joy round the necks of their idols and women". When I travelled in the Pamirs, I was particularly struck by the number of coral necklaces that were worn, in view of the remoteness of the country from the sea.[1] Marco also mentions that they were worn by the women of Kashmir. Again, Marco describes the "very large mastiffs as big as

[1] *Through Deserts and Oases of Central Asia*, p. 118.

donkeys". They are extremely fierce, and I recollect that when travelling in Lesser Tibet some forty years ago, I waited until the dogs were held before approaching an encampment.

Gaindu (Chien-chang), a region of Eastern Tibet, is next described, with its great salt lake where salt loaves "as big as a twopenny loaf" serve as currency with the *Kaan's* seal imprinted on them. In Gaindu mention is made of the abundance of gold, especially from the River Brius or Chinsa-Chiang, which aptly signifies the "River of Golden Sand".

At last the wayworn explorer reached the province of Carajan or Yunnan, "which is so large that it comprises no less than seven kingdoms. One rides five days west to the most important city called Yachi or Yunnan-fu. They have a lake quite one hundred miles in circuit. On leaving Yachi and travelling ten days westwards, one reaches the kingdom of Carajan." Here Marco first hears of the crocodile, which he describes as "a great snake having a very big head, and eyes larger than a big loaf; their mouth is so big, that they can swallow a man whole". The farthest province of Yunnan he termed Zardandan,[1] with its capital of Vochan or Yung-chang-fu. "All the people", he says, "have gold teeth; that is to say, each tooth is covered with gold." He also describes tattooing, and the strange custom of the *couvade*.

From Yunnan the tireless explorer rode downhill for two and a half days, and reached "a province towards the south, on the borders of India, called Mien (Burma). One travels fifteen days through difficult country and great forests, where there are elephants and unicorns in great numbers." He describes the capital, with its gold and silver towers, and the conquest of the country by the Mongols.

We now leave Cathay and turn to Manji,[2] with its capital, the famous city of Kinsai or Hang-chow, the "City of Heaven". To quote Marco:

> "On one side it has a beautifully clear fresh water lake; on the other side there is a very large river, which flows into every part of the city along a multitude of canals. There are ten principal squares, with sides half a mile long. In front of them is the main street, forty paces broad, running from one end of the city to the other; it is crossed by many bridges. All the aforesaid squares are surrounded by tall houses. Below these are shops. The citizens are idolators. They

[1] Yule considered that Persian was the colloquial language of foreigners at the Court of the *Kaan*. To give instances from Marco Polo, Zardandan signifies "Gold-teeth" in Persian, and Pulisanghin is probably *pul-i-sangi* or "stone bridge" in the same language. On the other hand "Caramoran" and "Acbaluc" are Mongol words.

[2] This name as applied to Southern China originated in a nickname signifying "Southern Ruffians".

eat all kinds of flesh, including that of dogs. The majority always dress in silk, which is due to its great abundance. . . . They carry on their crafts and trade with great honesty. There are twelve guilds, one for each of the principal crafts, each guild possessing 12,000 workshops with not less than ten men in each shop."

The population was numbered by millions, and the revenue exceeded 20,000,000 golden ducats; as Marco wrote, "it is the noblest and richest city in the world". There is no doubt that the great explorer was fully justified in making this statement.

Continuing his survey southwards, Marco describes the city of Fu-Chow. One of the most important of Professor Benedetto's additions consists of an account of some of its inhabitants, whom, after making inquiries, the Polos took to be Christians. "They had three painted figures representing three apostles—three of the seventy who went about preaching." Pelliot, however, assures us that this was a community of Manichaeans, whose pessimistic religion, referred to in Chapter III, spread from Persia to the Pacific Ocean on the East and to the Atlantic on the West.

South of Fu-Chow lay the great port of Zaitun, identified with Chuan-Chow-fu north of Amoy. Here Marco describes the great ships which have sixty cabins and are divided up into "thirteen tanks or compartments", by which arrangement many shipwrecks are avoided. These great ships "need 300 sailors".

Marco Polo served the *Kaan* "no less than seventeen years, and during all that time never ceased going upon missions". The Polos were anxious to return to Venice with their garnered wealth, but the *Kaan* was unwilling to part with them. However ambassadors appeared on the scene from Arghun, the *Ilkhan* of Persia, who asked for a "lady of the lineage of his wife Queen Bolgana, who had died". The *Kaan* "received them honourably, and gave them a hospitable welcome. Then he summoned a lady called Cocachin, who was seventeen years old, and most beautiful and charming." They accordingly started off with the Princess, but found the land route impracticable owing to disturbances and returned to Cambaluc. There they met Marco, who had just completed a mission in India, and, probably at his suggestion, they begged the *Kaan* to send them back to Persia by sea and to allow the experienced Polos to accompany them.

The *Kaan* somewhat unwillingly complied with these requests, and prepared a squadron of fourteen ships to escort

the Princess to Persia. The voyage to Java took three months. "This island is immensely rich. They have pepper, nutmegs, spikenard, galingale, cubebs,[1] cloves: in a word all the precious spices one can think of. The greater part of the spices sold in the world come from this island." Continuing the voyage, Marco Polo describes the islands as he passes, his Java the Less being undoubtedly Sumatra, where Marco saw a rhinoceros, which he calls a unicorn. The flotilla was detained five months in this island, where the crews were landed, and constructed a strong fortress as a defence against the natives, who were cannibals.

In due course the island called Seilan (Ceylon) was reached. Marco refers with the enthusiasm of an expert to the most beautiful ruby in the world, owned by the King; it "is about a palm long and quite as thick as a man's arm".[2] He also gives an interesting account of Sagamoni Borcan or "Sakyamuni Buddha". He refers to Adam's Peak, but states that "the idolators say it is the sepulchre of Sagamoni Borcan".

From Ceylon Marco visited "the great province of Maabar", which is now termed the Coromandel Coast. As a jeweller he naturally refers in detail to the valuable pearl fisheries. He also describes with enthusiasm the mass of jewels worn by the King round his neck, arms, legs and on his toes. After the pearls we hear of the diamonds at Mutfili or Telingana and how they are procured.

> "You must know that there are certain great, deep gullies, with such precipitous sides that no one can go to the bottom of them. But this is what the people do; they take many pieces of raw and bleeding flesh, and throw them into the gullies. The places into which the flesh is thrown are full of diamonds, which get stuck to the flesh. Now you must know that on these mountains there are many white eagles, that feed on serpents. When they see the pieces of flesh at the bottom of the gullies, they swoop down upon them, and carry them away. Then the men, who have all the time been carefully watching whither the eagles fly, as soon as they see them settled down and tearing the flesh, hasten thither as fast as possible. The eagles fly away, and, in their fear at seeing the men suddenly coming upon them, do not carry the flesh away with them; on reaching the spot where the flesh lies, the men take it, and find plenty of diamonds stuck to it."

This industry also is described in the *Arabian Nights*.

In the Pepper Country Marco visited the famous port of Coilum or Quilon, and refers to its brazil wood, its pepper and its indigo. His description of the animal and bird life merits quotation.

[1] Galingale is a species of ginger; cubebs a variety of pepper.
[2] Sindbad the Sailor refers to this ruby in the passage quoted at the head of Chap. V.

"There are many strange animals, differing from those in any other part of the world. Thus, I assure you they have certain black lions, with not a spot or mark of any other colour on them. There are various kinds of parrots: some are white as snow, with vermilion beaks and legs; others are vermilion and blue, and they are the prettiest things in the world to look at; others again are green; there are some very small ones, too, that are also exceedingly pretty. Their peacocks are much bigger and more beautiful than ours."

On continuing the voyage northwards, we are told of the province of Lar or Gujerat, where Marco was much impressed by the Brahmins, "who eat no meat, drink no wine and lead a very chaste life. They would kill no living creature." Again, "they have among them certain regulars known as Chughi or Yogis, who live from a hundred and fifty to two hundred years. They take quicksilver and sulphur, and mix them together, making a drink with them, and they say that it prolongs life. I would add that for nothing in the world would they kill a fly or a flea or a louse."

From Gujerat, we hear of Canbaet (Cambay) and Semenat or Somnat, with its "exceedingly cruel and fierce idolators", and so, coasting Kesmacoran (Kej-Makran), where Marco was following in the wake of Nearchus, he finally reaches the familiar harbour of Hormuz. Here the voyage ended, but at what a cost! Without counting the sailors, out of 600 passengers, "all died except eighteen, and of Arghun's three envoys, only one survived". Fortunately the beautiful Cocachin arrived in Persia safe and sound. Her intended husband Arghun had died in the meanwhile, but no doubt she much preferred to marry his son Ghazan, who was the greatest of the Ilkhan rulers of Persia. Marco tells us that "when the three envoys after the fulfilment of their mission bade the Princess farewell, she wept for sorrow at their departure".

In 1295, the wayworn Polos after an absence of twenty-five years reached Venice, where their reception may be compared to that accorded to their great prototype Ulysses.

Marco Polo has been criticized for not mentioning the use of tea as a beverage, and certainly the existence of the art of printing escaped his notice, although he describes the manufacture of paper money in some detail. As to the alleged overlooking of the Great Wall of China, his mention of the "place that in our country is known as Gog and Magog" tends to show that he was referring to it.[1]

In any case, these omissions are of very minor import-

[1] *Vide* Yule, Vol. I, p. 292, note.

ance. Exploration gained as never before in the history of Europe, and when I made a pilgrimage to the great explorer's house in the *Corte del Milione*, I felt that I was paying homage not merely to Venice's most illustrious citizen, but to the greatest of European explorers by land.

Marco Polo has been fortunate in finding a great biographer in Sir Henry Yule, and this chapter may fittingly be closed with a quotation from his noble eulogy:

"He was the first Traveller to trace a route across the whole longitude of Asia, naming and describing kingdom after kingdom which he had seen with his own eyes; the Deserts of Persia, the flowering plateaux and wild gorges of Badakshan, the jade-bearing rivers of Khotan, the Mongolian steppes, cradle of the power that had so lately threatened to swallow up Christendom, the new and brilliant Court that had been established at Cambaluc: the first Traveller to reveal China in all its wealth and vastness, its mighty rivers, its huge cities, its rich manufactures, its swarming population, the inconceivably vast fleets that quickened its seas and its inland waters; to tell us of the nations on its borders with all their eccentricities of manners and worship; of Tibet with its sordid devotees; of Burma with its golden pagodas and their tinkling crowns; of Laos, of Siam, of Cochin China, of Japan, the Eastern Thule, with its rosy pearls and golden-roofed palaces; the first to speak of that Museum of Beauty and Wonder, still so imperfectly ransacked, the Indian Archipelago, source of those aromatics then so highly prized and whose origin was so dark; of Java the Pearl of Islands; of Sumatra with its many kings, its strange costly products, and its cannibal races; of the naked savages of Nicobar and Andaman; of Ceylon, the Isle of Gems, with its Sacred Mountain and its Tomb of Adam; of India the Great, not as a dream-land of Alexandrian fables, but as a country seen and partially explored, with its virtuous Brahmans, its obscene ascetics, its diamonds and the strange tales of their acquisition, its sea-beds of pearl, and its powerful sun; the first in medieval times to give any distinct account of the secluded Christian Empire of Abyssinia, and the semi-Christian Island of Socotra; to speak, though indeed dimly, of Zanzibar with its negroes and its ivory, and of the vast and distant Madagascar, bordering on the Dark Ocean of the South, with its Ruc and other monstrosities; and, in a remotely opposite region, of Siberia and the Arctic Ocean, of dog-sledges, white bears, and reindeer-riding Tunguses."

CHAPTER X

IBN BATTUTA, THE GREATEST MOSLEM EXPLORER

> "The Sultan sits cross-legged on a throne placed on a dais carpeted in white. A hundred armour-bearers stand on the right and a like number on the left, carrying shields, swords, and bows. Fifty elephants are brought in, which are adorned with silken cloths, and have their tusks shod with iron for greater efficacy in killing criminals. These elephants are trained to make obeisance to the Sultan, and when they do so, the chamberlains cry in a loud voice *Bismillah*."
>
> *The Durbar of Muhammad ibn Tughlaq.*

MARCO POLO opened the land-gates and the water-gates of China to Christian travellers, among whom was John de Monte Corvino, who died Archbishop of Peking. He was followed by Friar Odoric, who wandered over Asia and visited Lhasa. An explorer of quite a different kind, and the greatest of all Moslem explorers, was Muhammad ibn Abdulla, Ibn Battuta, an inhabitant of Tangier, who belonged to a family of *Kazis* or Judges.

In 1325, when twenty years of age, he set out on his wonderful series of journeys, which lasted for some thirty years and covered an even wider range than those of Marco Polo. The original object of Ibn Battuta was to perform the pilgrimage to Mecca, and, in the first instance, he travelled by land across Northern Africa to Alexandria, where he inspected the famous lighthouse. He visited Damietta, and proceeded thence to Cairo, which he enthusiastically describes as "mother of cities and seat of Pharaoh the tyrant, mistress of broad regions and fruitful lands, boundless in multitude of buildings, peerless in beauty and splendour".[1]

From Cairo Ibn Battuta "travelled into Upper Egypt with the intention of crossing the Red Sea to Hejaz". He passed through Assiut and Luxor and traversed the desert to the port of Aydhab, situated on the Red Sea opposite Jeddah. Owing to disturbances no ships were sailing, and accordingly,

[1] Vide *Ibn Battuta*, by H. A. R. Gibb (Broadway Travellers Series), on which valuable work I have mainly relied in this chapter, and from which my quotations are taken. Sir Percy Cox has read this chapter and made valuable suggestions.

changing his plans, he returned to Egypt, determined to make the pilgrimage from Damascus.

Crossing the desert to Gaza, he visited Hebron, Bethlehem and Jerusalem, where he describes the celebrated Dome of the Rock. He also visited Acre, Tyre and Tiberias, and mentions the Sea of Galilee. He travelled through the states founded by the crusaders, visiting Tripoli, Kerak, once the great fortress of the Knights of St. John, and Antioch, and refers to the Syrian branch of the Assassins, "who are the arrows of the Sultan. By means of them he strikes those of his enemies who escape into other lands." Damascus, on which fair city Mohammed based his description of Paradise, "surpasses all other cities in beauty, and no description, however full, can do justice to its charms".

Ibn Battuta was the first explorer of Arabia, and the vivid account which he gives of the pilgrimage to Mecca is of great importance. Starting from Damascus on September 1, 1326, and passing Kerak, the caravan reached Maan, the last town in Syria, and entered the desert of which it is said: "He who enters it is lost, and he who leaves it is born." Tabuk he describes as "the place to which the Prophet led an expedition". A four days' halt was made at this station in view of the "terrible desert between Tabuk and Al-Ula".

At Al-Hijr "in some hills of red rock, are the dwellings of Thamud. They are cut in the rock and have carved thresholds". The story of the destruction of the tribe for disobedience is given in the Koran: "Whereupon a great earthquake overtook them with a noise of thunder, and in the morning they lay dead in their houses, flat upon their breasts." It was the examination of these tombs that first inspired Doughty to start on his wanderings in Arabia from this station, later known as Madain Salih. Doughty also visited Al-Ula or Al-Ala.

At Medina, Ibn Battuta prayed in the illustrious "garden", situated between the tomb of the Prophet and the noble pulpit, and he reverently touched the remaining fragment of the palm-trunk against which Mohammed stood when he preached. In the onward journey a good description is given of the stages to Mecca, where Ibn Battuta duly performed the rites of the pilgrimage.

The journey of the great Moslem explorer from Medina across Arabia to Baghdad is of still greater importance. Leaving Mecca in November, he returned to Medina. From this city to Baghdad the pilgrim route, thanks to the generosity

of Zubayda, wife of Harun-al-Rashid, was provided with reservoirs wherever there was water; and its stages are given by Hamdani, who calculates the distance between Medina and Faid at 234 English miles.

Four stages from Medina, the narrative continues, "we entered the land of Nejd, which is a level stretch of country extending as far as the eye can see, and we inhaled its fine scented air". Faid, the ancient capital of Nejd, situated some four stages to the south-east of Hail, is described as lying half-way between Mecca and Baghdad. From Faid onwards, the only difficulty was the defile known as the "Devil's Pass", beyond which was Waqîsa, with its water-tanks guarded by a castle. Upon entering Iraq, Ibn Battuta makes a reference to Kadesiya, "where the famous battle was fought against the Persians, in which God manifested the triumph of the religion of Islam". Later he gives an accurate description of the tomb of Ali at Najaf, with its silver threshold which is kissed by the devout pilgrim.

From Najaf the traveller set out for Basra, and thence to Ubulla, occupying the site of modern Basra, a place of palm groves and shady canals. From Basra he made an excursion into Central Persia, visiting picturesque Shushtar, with its dam constructed by Roman prisoners,[1] and so across the mountains to Isfahan and Shiraz. Of the latter city Ibn Battuta writes: "In the whole East there is no city that approaches Damascus in beauty of bazaars, orchards and rivers, but Shiraz." He then extols the Ruknabad River, which to-day is a very small rill. It must have shrunk to a minor measure since Hafiz sang:

> "Tell them, their Eden cannot show
> A stream so clear as Ruknabad."

Among the sanctuaries he mentions the grave of Sadi, whom he describes as the greatest poet of his time, and whose tomb I have myself visited more than once. Indeed I felt a deep affection for Shiraz, without going as far as Sadi, who wrote: "Even the stranger forgets his home, and becomes its willing thrall."

From Shiraz Ibn Battuta travelled to Kazerun, and returning to Mesopotamia, visited Kufa, which gave its name to Kufic writing, and was at one time the capital of the Caliphate. Baghdad had not recovered from its sack by Hulaku Khan, and mosques and colleges alike were in ruins. Of

[1] Vide *Ten Thousand Miles in Persia*, p. 253.

considerable interest was Ibn Battuta's meeting with Abu Said, the last of the Ilkhan rulers of Persia, in whose suite he travelled to Tabriz, where he struck Marco Polo's route. He then visited Samarra and Mosul. Thence he went to Nisibis, "an ancient town for the most part in ruins". This was the great frontier fortress of Rome, ceded to Persia after the disaster suffered by Julian in A.D. 363.[1]

Ibn Battuta returned to Mecca from Baghdad in 1327, and settled there for three years, partly no doubt with the intention of increasing his standing by studying under the leading doctors of the sacred law. In 1330 he again set off on his travels, and explored Yemen, the classical *Arabia Felix*, giving a good account of the three towns of Zabid, Taiz and Sanaa, and, in ignorance of the regular south-west monsoon, noticed that the rain only fell in the hot weather. From Yemen he proceeded to Aden, which "is surrounded by mountains and can be approached from one side only; it has no crops, trees, or water, but has reservoirs in which rain-water is collected". The well-known port could hardly be better described.

From Aden, Ibn Battuta, following in the footsteps of Masudi, voyaged down the east coast of Africa, stopping at Zeila, "the town of the Berberah, who are a negro people. It is a city with a great bazaar, but it is the dirtiest town in the world." From Zeila fifteen days' sail brought the traveller to Magdashaw (Mogdishu), where he was well received, and noted that the *Shaykh*, who was of Berberah origin, knew Arabic. Ibn Battuta continued his voyage to Mombasa and Kilwa, and, at the latter port, was told of Sofala, "lying a fortnight's journey (south) from Kilwa", where gold dust could be bought.

From the African coast, Ibn Battuta touched at Dhufar, the Frankincense Land, and then reached Oman. Passing Sur, he landed and described the interior of the country, and then entered the Persian Gulf. He mentions Hormuz, situated on the coast, twice visited by Marco Polo; and "nine miles from the shore is New Hormuz, which is an island. It is a large and fine city with busy markets." Hormuz is an extremely desolate island. The land is covered with salty efflorescence, while a bare, rugged range of volcanic origin crosses the island. There is no fresh water, and the city depends on tanks to catch the scanty rainfall and on water brought from the neighbouring island of Kishm. Yet Hormuz

[1] *Vide* Sykes, *History of Persia* (3rd ed.), Vol I, p. 422.

(or Ormus) became the emporium of the East, and of it Milton wrote :

> " High on a throne of royal state, which far
> Outshone the wealth of Ormus and of Ind,
> Or where the gorgeous East with richest hand
> Showers on her kings barbaric pearl and gold,
> Satan exalted sat."

From Hormuz Ibn Battuta made an excursion inland, visiting Lar and returning to the coast at Qays, the Kisi of Marco Polo. He then described the pearl fisheries and the Bahrein Islands, which I consider to be the only pleasant spot in the torrid Persian Gulf. Landing on the Hasa coast in 1332, the tireless voyager made a second journey across Arabia, of which he gives no description, merely mentioning Yamama, which, at that period, was the capital. But he evidently followed the pilgrim route which Philby explored some six centuries later. Ibn Battuta thus crossed Arabia in both directions by different routes.

His next journey led him to Anatolia. He landed at Alaya and thence coasted to Adaliya, the principal port of Anatolia, which was ruled by petty chiefs. He then made for Iconium where he visited the mausoleum of Jalal-ud-Din Rumi, the founder of the *Mevlevi* or " dancing dervishes ", and the greatest of Islamic mystical poets. Continuing his wanderings he visited Ephesus, where he bought a Greek slave-girl for forty *dinars* or twenty guineas, and so to Smyrna, which he described as being " mostly in ruins ".

At Brusa he gives a valuable account of the tribe of Osmanlis. " The Sultan of Brusa was Orkhan Beg, son of Othman Chuk. It was his father who captured Brusa from the Greeks ; his son besieged Nicaea twelve years before he captured it, and it was there that I saw him." Continuing his journey Ibn Battuta visited Kastamuni, where British officers were imprisoned during the Great War, and from Sinope he crossed the Black Sea to Kaffa. An excellent description is given of a journey to Sarai and a visit to Constantinople, where he touches the lands described by the elder Polos.

The next journey of the indefatigable traveller led him to the fertile oasis of Khwarizm or Khiva, with its capital Urganj, " the largest, greatest, most beautiful and most important city of the Turks ", which was destroyed by Chengiz. From Urganj, Ibn Battuta struck the route of the elder Polos at Bokhara, and visited Samarkand, destined before long to become the capital of Tamerlane.

From Samarkand he crossed the Oxus at Tirmiz, thereby entering the province of Khurasan, as it then was, and reached Balkh, which he describes as having been utterly ruined by Chengiz Khan. Thence he travelled to Herat, which had been rebuilt after its destruction, and continuing his journey reached Meshed, the burial-place of the *Imam* Riza and of the celebrated Harun-al-Rashid. He describes the beautiful tile-work, and the "great dome of elegant construction" which a Safavi monarch some two centuries later covered with gold plates. Nishapur too had been rebuilt on its present site, and its manufacture of silk and velvet is mentioned.

Ibn Battuta had determined to visit India, and accordingly he crossed the Hindu Kush or "Slayer of Indians", whose name, he explains, originated from the number of slave-boys and slave-girls who died there from the cold. After the passage of the Hindu Kush, he reached Charikar, which is probably the site of Alexandria *ad Caucasum*, mentioned in Chapter II. He then visited Ghazna, "the town of the famous warrior-sultan Mahmud ibn Sabuktagin", who is known in the East as the "idol-breaker". He finally reached the Indus in September 1333 with the remark "Here ends the narrative of this journey. Praise be to Allah, Lord of the Worlds."

In no section of his journeys does Ibn Battuta show to greater advantage than in India. He was treated as a distinguished Moslem, and consequently was in a position to turn his residence of some eight years to good account. His object was to enter the service of Muhammad ibn Tughlaq, who welcomed men of position to his court and gave them posts of great importance.

At Multan he received an invitation to the Court at Delhi, a march of forty days. His keen eye noted the strict rules of caste as regards eating alone and being unobserved while eating. He also commented on the awful rite of *sati*, at which he assisted—and fainted. Again he referred to the practice of Indians drowning themselves in the sacred Ganges "to seek approach to *Kusay*,[1] *Kusay* being the name of God in their language".

The distinguished traveller was warmly welcomed by the Sultan, whom he aptly describes as being "the fondest of making gifts and of shedding blood". He was appointed a *kazi* and treated most generously. He was also made guardian of the Mausoleum of Sultan Qutb-ad-Din. Among the most

[1] *Kusay* is probably Krishna.

amazing acts of Muhammad Tughlaq was that of compelling the inhabitants of Delhi, whom he disliked, to leave that city and to proceed to Dawlatabad. To quote our author:

> "The majority complied with the order, but some of them hid in the houses. The Sultan ordered a search, and his slaves found two men in the streets, one a cripple and the other blind. He gave orders that the cripple should be flung from a mangonel and the blind man dragged from Delhi to Dawlatabad. He fell to pieces on the road, and all of him that reached Dawlatabad was his leg. It was in this state that we found Delhi on our arrival, empty and unpopulated."

Ibn Battuta resided at the court of this monster for nearly eight years. He remained in favour for a long time, but his curiosity, which prompted a visit to a *Shaykh* who was suspect, nearly caused his execution. However, by assuming the rôle of a hermit and giving away his property to the poor, he regained the royal favour, and was appointed an ambassador to the court of China.

The embassy started "accompanied by the Chinese ambassadors, fifteen in number" with an escort of a thousand cavalry, and some infantry. Not far from Delhi they engaged in a campaign against some rebels, during the course of which Ibn Battuta was captured, stripped, and only just escaped with his life. The ambassadors then resumed their journey, and mention is made of a "Sultan of Janbil who was killed after besieging Gwalior". This reference is to the Raja of Dholpur. The journey continued through Dhar, the chief city of Malwa, and so to Dawlatabad, which Muhammad, realizing its importance as a base for further conquests in Southern India, wished to make his capital. The sea was reached at Cambay, and at Gandhar the ambassadors embarked. They touched at the island of Sandabar, destined under the name of Goa to be the seat of the Portuguese dominion in the East, and in due course reached the land of Malabar, "which is the Pepper country". Ibn Battuta gives an excellent account of this coast. He finally landed at Calicut, where the embassy stayed for three months "awaiting the season of the voyage to China".

Disaster again befell the unfortunate Ibn Battuta, for, after the ships were laden, "the junk which carried the Sultan's presents and all on board were drowned. When those on the *Kakam* [1] saw what had happened to the junk, they spread their sails and went off, with all my goods and slave-boys and slave-girls on board, leaving me alone on the beach." After attempting in vain to rejoin his ship by land and then

[1] A smaller vessel on which Ibn Battuta had arranged to sail.

taking part in a successful attack on Sandabar, Ibn Battuta heard from two of his slaves who had returned to Calicut that " the ruler of Java the Less [Sumatra ?] had taken my slave-girls, that my goods had been seized by various hands, and that my companions were scattered to China, Sumatra and Bengal ". Thus was enacted a scene which constitutes an epitome of the dangers attending sea voyages in the Middle Ages, and might well be a chapter taken from the adventures of Sindbad the Sailor.

To this misfortune we owe the first account of the Maldive Islands, " which are one of the wonders of the world, and number about two thousand in all ". Ibn Battuta was welcomed by the Queen, who appointed him *Kazi*, and he settled down, marrying the daughter of the Vizier and three other wives. " It is easy to get married in these islands ", he remarks. The chief exports of the islands were coco-nuts, cowrie shells, and rope made from the fibre of the coco-nut. This rope is used for fastening the planks of ships, and Ibn Battuta points out that in view of the numerous reefs, this method gives a certain resilience and the ship does not fall to pieces.

For some time Ibn Battuta attempted to drive the primitive people to mosque by whipping the absentees. He also tried in vain to induce the women to wear clothes. Finally the Vizier grew jealous of his influence, and the restless traveller resumed his wanderings.

His next voyage brought him to Ceylon, where the " infidel Sultan " received him with much kindness and arranged for him to visit Adam's Peak. Passing through Kunakar, the capital, he reached the mountain, and scaled it by the aid of chains, which are still in existence. To quote his account, " The mountain of Sarandib (Ceylon) is one of the highest in the world. When we climbed it, we saw the clouds below us, shutting out our view of its base. On it there are many ever-green trees and flowers of various colours, including a red rose as big as the palm of a hand."

Leaving Ceylon for the Coromandel coast, Ibn Battuta's ship was wrecked, but he reached the shore in safety, and was welcomed by the Sultan, who was a Persian of Damghan and a relative of the wife the traveller had married at Delhi. He nearly died from fever, probably as the result of exposure, and, after his recovery, he embarked on a ship, was stripped by pirates of the jewels given him in Ceylon, and found himself back at Calicut, as poor as he had ever been. Nothing

daunted, he again visited the Maldive Islands, where he was generously treated, but he decided not to remain, and set out on a voyage of forty-three days to Bengal, "a hell full of good things". Landing at Chittagong, he made a journey across Assam to Sylhet, with the object of visiting "a notable saint, *Shaykh* Jalal ud-Din of Tabriz". He was welcomed by the *Shaykh*, who presented him with a mantle of goats-hair, about which a wonderful story is told.

From Bengal, Ibn Battuta sailed for Java, a voyage of forty days. On landing he found that he had a friend at Court, whom he had met at Delhi. Consequently he was well received at the audience, where he saw with astonishment horses that danced before the Sultan. Arrangements were made for his onward journey to Mul-Java, which is identified with the Malay Peninsula, where the "infidel Sultan" entertained him. After a month's voyage, the "motionless sea" was reached, where the junks were towed by attendant vessels, aided by their own sweeps, and, after calling at a port which cannot be identified, the voyage to China was successfully accomplished.

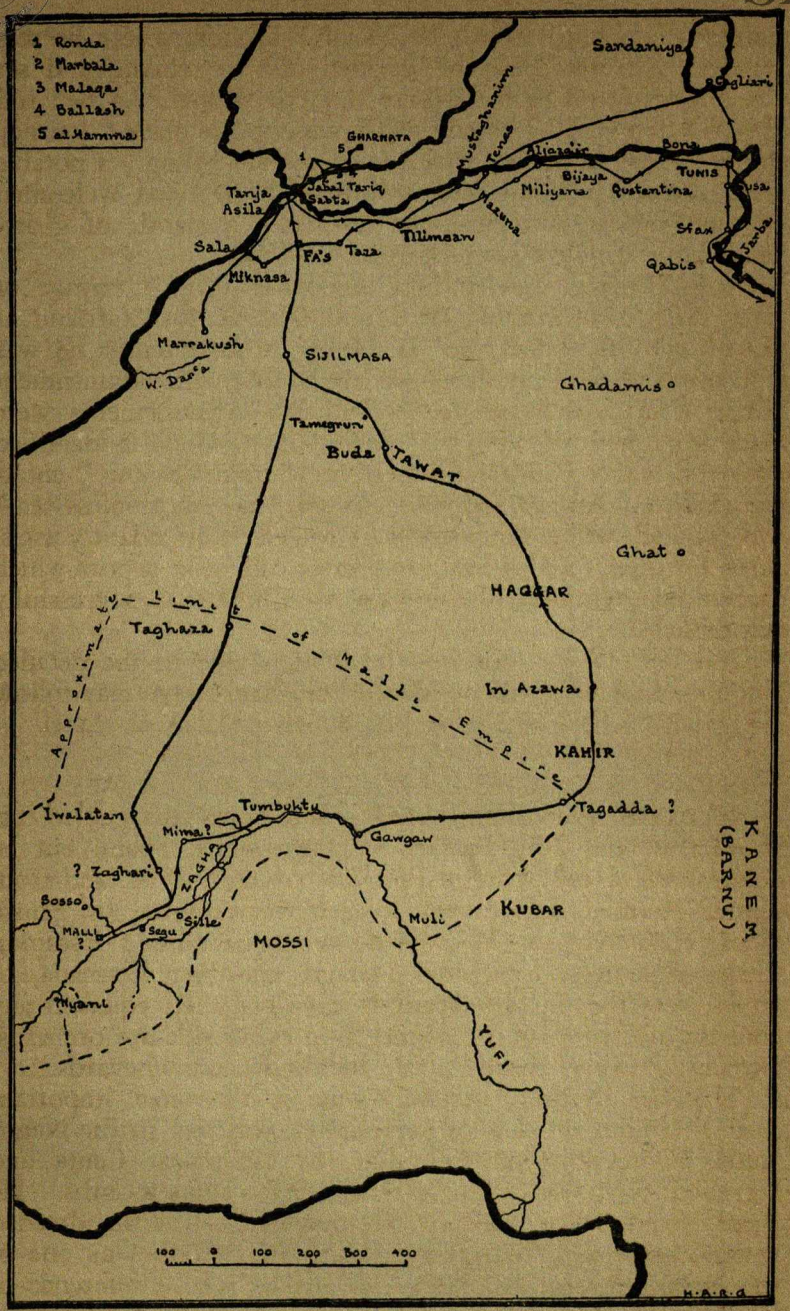
Ibn Battuta was not in a position to add to the detailed account of China given by Marco Polo, and so we may follow him back to Fez, where he laid down the staff of travel.

* * * * *

Incredible as it might appear, there is an epilogue to this wonderful tale. Ibn Battuta had not visited Spain, but he determined to take part in the *Jihad* or Holy War, and from Ceuta, destined before very long to be captured by Prince Henry the Navigator, he crossed over to Gibraltar. Escaping Christian raiders, he visited Malaga, and then Granada, of which he writes: "Its environs have not their equal in any country in the world. Around it on every side are orchards, gardens, flowery meads, noble buildings and vineyards."

His last journey, certainly one of the most important from the point of view of exploration, was that to the Negro lands. Embarking at Gibraltar, he landed at Ceuta and travelled to Arzilla,[1] where he remained for some months. He then visited Sallee, the port from which sailed the dreaded rovers, and so to Marrakesh, which he describes as one of the most beautiful of cities. He makes special reference to the Mosque of the Kutubiyin, which was still standing some ten years ago, when I visited Morocco.

[1] These ports he termed Sabta, Asila and Sala.



SKETCH MAP OF WEST AFRICA TO ILLUSTRATE IBN BATTUTA'S TRAVELS.

Ibn Battuta took leave of the Sultan at Fez, and, crossing the Atlas Range, reached Sijilmasa, in February 1352, a centre which has been succeeded by neighbouring Tafileh, over which the French have recently established their authority. There he bought "camels and a four months' supply of forage", and after twenty-five days reached Taghaza with its "houses and mosques built of blocks of salt". For ten days' journey from this dreary town there was a waterless tract of desert, till finally at Iwalatan the Sahara ended.

Before dealing with the traveller's further experiences, a brief reference to the Western Sudan at this period is called for. Asiatic influence reached the country through the conversion to Islam of large numbers of the pagan Sudanese, a process due to the Arab-Berber civilization. There is consequently a marked difference between the Africans of the Sudan, with their Asiatic blood, and the pure negroes of the west coast and of Central Africa.

Musa, the great ruler of Melle, captured Timbuktu in 1336, and built the great mosque of cut stone, employing a Spanish architect. Before his death he ruled over a wide empire, which included much of the Sahara. Ibn Battuta reached Malli or Melle under his successor at a time when Songhay was asserting its independence.

The latter state reached its zenith at the end of the fifteenth century, when it became the predominant state in the Sudan. Under Askia it stretched from the salt-mines of Taghaza in the Sahara to the range which defined the Guinea coast; eastwards it extended to Lake Chad, and westwards to the Atlantic Coast. Timbuktu was its capital, and a fleet with its headquarters at Kabara made the Niger safe for traders. The internal trade was centralized at Jenne, while foreign trade reached Timbuktu from Morocco, Tripoli and Egypt. Scholars and learned men from all over the Moslem world were welcomed at the Songhay Court. Its power lasted until the conquest of the Western Sudan by Morocco in 1595.

At Iwalatan the explorer had reached "the northernmost province of the negroes". He was not pleased with his reception, and disliked "their lack of manners and their contempt for the whites". Nor did he like the food; but he decided to make the journey to Malli, twenty-four stages farther south. On the way he noted the practice of storing water in the baobab trees, which still prevails. Of greater interest to him as a Moslem was a community of whites of the Ibadite sect, a remnant of the once powerful and Puritanical

Kharijites, a member of which assassinated the Caliph Ali. The Arabs of Oman mainly belong to this sect.

Finally, Ibn Battuta struck the Niger at Karsakhu.[1] He calls it the Nile, but lays down that it "flows from there down to Kabara and thence to Zagha. . . . Thence it descends to Timbuktu and Gawgaw. . . . It cannot be visited by any white man, because they would kill him before he got there."

Ibn Battuta presented himself at the Court of Sultan Sulayman at Malli, a state which is mentioned somewhat doubtfully by the Portuguese historian Azurara. He was disgusted at the hospitality-gift, which consisted of "three cakes of bread, a piece of beef fried in native oil, and a calabash of sour curds", since he expected "rich robes of honour and money".

The Arab explorer gives an interesting account of a reception.

> "The armour-bearers bring in magnificent arms—quivers of gold and silver, swords ornamented with gold and with golden scabbards, gold and silver lances, and crystal maces. The interpreter Dugha comes with his four wives and his slave-girls, who are about one hundred in number. They are wearing beautiful robes, and on their heads they have gold and silver fillets, with gold and silver balls attached. If anyone addresses the king and receives a reply from him, he uncovers his back and throws dust[2] over his head and back. Again witnesses of a statement confirm it by twanging their bowstrings."

Such was the wealth and civilization of the Malli Empire.

Ibn Battuta left Malli, after a stay of some eight months, in February 1353, and on reaching a channel of the Niger, was astonished at the huge hippopotami, "taking them to be elephants". At Timbuktu, he makes no reference to the mosque, which was obviously inferior to those he had recently seen in Spain and Morocco, but he remarks that "most of the inhabitants are of the Massufa tribe". From Timbuktu "I sailed down the Nile [Niger] on a small boat, hollowed out of a single piece of wood".

Gao was the farthest point to which Ibn Battuta penetrated on the Niger. There he prepared to recross the desert to Tagadda, the largest town in the Tuareg country, where he waxes lyrical about the women, describing them as "the most

[1] Karsakhu is the "market of Kara" on the left bank of the Niger, and Gawgaw (now Gao) is to-day an important aviation centre. Idrisi's description of the Nil-al-Sudan flowing westwards to the Atlantic is given in Chapter V.

[2] In Persia a petitioner used to say: "This is the petition of the dust of the foot," etc. The intention in both cases is to emphasize humility.

perfect in beauty and the most shapely in figure, of a pure white colour and very stout".

At Tagadda, Ibn Battuta received a message from the Sultan of Morocco ordering him "to proceed to his sublime capital". He started off "with a large caravan which included 600 women slaves", and travelling by Äir, Haggar and Sijilmasa, finally arrived at the royal city of Fez, "where I kissed the hand of the Commander of the Faithful, and, after long journeying, settled down under the wing of his bounty".

Here we may leave Ibn Battuta, whose claim to fame rests not only on his journeys in Arabia and the Western Sudan, of which he was the first explorer, but on travels to almost every part of the known world. On reading his narrative, the salient characteristic we discover is its accuracy in dealing with places and with historical personages and events. There is the charm of the *Arabian Nights* in his adventures, and throughout he is frankness itself as to his motives, and seldom exaggerates. It is remarkable how his work completes that of Marco Polo. The illustrious Venetian supplied Europe with a wonderful account of China, but was less at home in Moslem lands, whereas the descriptions given by Ibn Battuta of Moslem centres from Canton to Timbuktu are unsurpassed.

CHAPTER XI

BARTHOLOMEW DIAZ CIRCUMNAVIGATES AFRICA

"Let things be—not seem.
I counsel rather—do, and nowise dream!
Earth's young significance is all to learn:
The dead Greek lore lies buried in the urn
Where who seeks fire finds ashes."

ROBERT BROWNING.

HITHERTO in this work we have been dealing with the ancient or medieval world. Suddenly, a few years before the close of the fifteenth century, by the practically simultaneous discovery of the ocean route to India and of the immense New World that lay beyond the Atlantic Ocean to the west, Europe burst the shackles of the Middle Ages, and, mainly through her development of sea-power, gradually evolved the might, wealth and civilization of the present day. To set the stage for these amazing events, which ultimately put an end to the deadly fear of Moslem ascendency in Europe, we must refer briefly to the position of affairs in the world as then known.

The period of Mongol supremacy had lasted but a century, and Tamerlane, who shattered it, so far as Central Asia and Persia were concerned, at the end of the fourteenth century, was succeeded by a dynasty of Princes whose rule included only those countries. Consequently there was no longer any direct communication with China by land. Indeed, it cannot be too clearly realized that, at this period, the trade-routes of Asia, Africa and the sea-routes of the Indian Ocean were almost without exception in Moslem hands.

Politically, the advance of the Osmanli Turks constituted a terrible menace to Europe. In 1354 they crossed the Dardanelles and seized Gallipoli, and seven years later they occupied Adrianople. In 1379 they defeated a coalition of the Slav Princes at Kossovo and annexed Bulgaria, Serbia and Wallachia; and at the battle of Nicopolis, fought in 1396, the chivalry of Europe broke and fled, utterly outmatched by the Janissaries. The defeat of Bayazid by Tamerlane in 1402 saved Constantinople for half a century, but, in 1453, the great barrier-city of European civilization, left

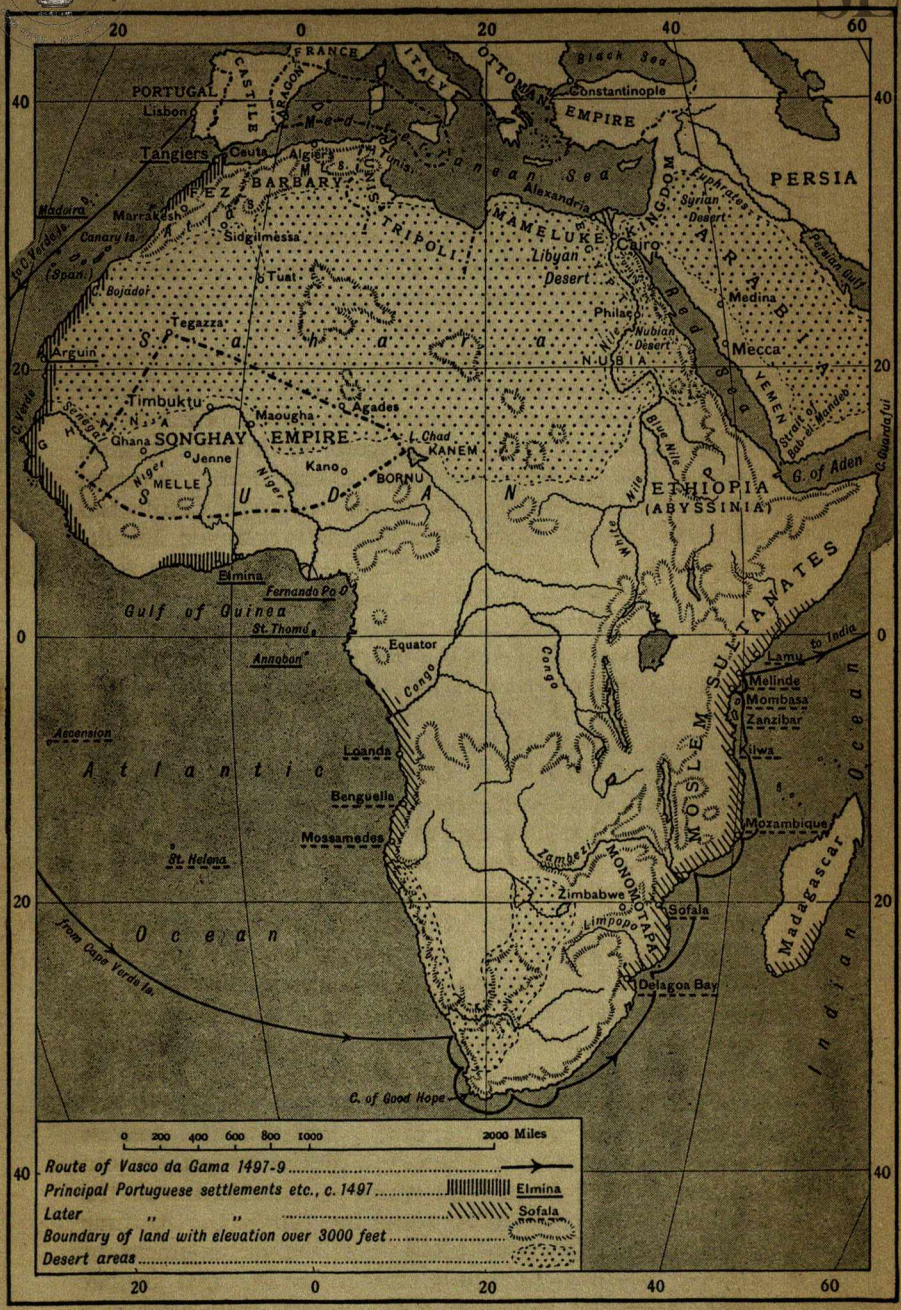
to its fate by the short-sighted Christian powers, was captured, and Turkey continued her westward advance, which threatened the very existence of European civilization.

The bitter rivalry between the Italian states exhausted their resources, and opened the way for the Turks. Venice finally crushed Genoa, while Florence and Genoa had previously broken the strength of Pisa. It is interesting to reflect that had the Italian states been able to combine as effectually as did the members of the Hansa League, the Turks would never have penetrated to the walls of Vienna.

While the Turks were advancing in Eastern Europe from strength to strength, albeit not to final victory, in the Iberian peninsula the Moslems were slowly but surely being driven out. Before the end of the thirteenth century the western seaboard, down to Cape St. Vincent, had been conquered by the Counts of Portugal, while the Kings of Castile had expelled the Moors from Andalusia and occupied Seville. Portugal was fortunate in the possession of a coast-line some 300 miles in length, containing many deep and sheltered harbours. On the other hand, Castile and Leon lay between her and the markets of Central Europe. Consequently she had every inducement to seek her fortune at sea.

The organizer of the marvellous naval development of Portugal was Prince Henry the Navigator, whose mother was a daughter of John of Gaunt. In 1415 he initiated a crusade against the Moors of North Africa and captured the port of Ceuta. He then set to work to train the hardy fishermen into skilled navigators and seamen. He was equally determined to build ships suitable for long ocean voyages, and before his death the fishing vessel had developed into a decked ship of 200 tons with three or four masts. Meanwhile, the best navigators and cartographers had been brought from Italy and Sicily to train his pilots in ocean voyaging, and improvements were effected in the compass. Finally, Europe was ransacked for books, among them the work of Marco Polo.

The original design of the Prince, who was the greatest man of his age, was to outflank the Moors by sea, to join forces with Prester John, who was now identified with the Prince of Ethiopia, and thus crush the Moslems. As time passed, Prince Henry aimed rather at the development of commerce, whereby he could strengthen Portugal in her crusades against the Moslems, whose cruisers were often met with at sea. He was the first statesman to realize that oceans



AFRICA IN THE FOURTEENTH, FIFTEENTH AND SIXTEENTH CENTURIES.
(Reproduced from "*The Universal History of The World*," edited by J. A. Hammerton, by courtesy of the publishers, The Educational Book Co. Ltd.)

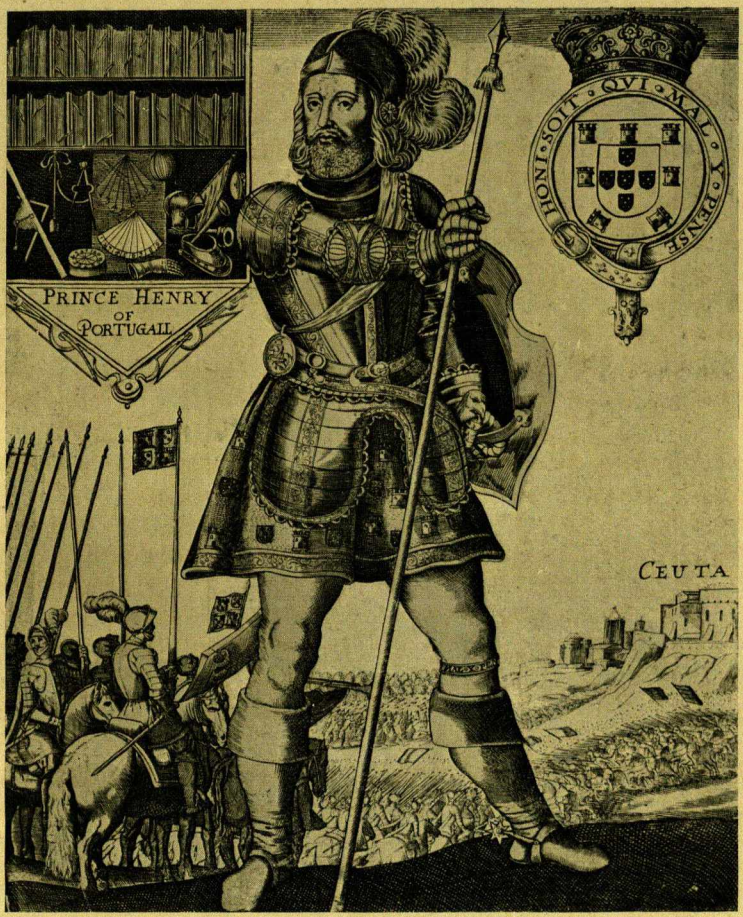
were not barriers, but rather great highways for commerce, and that sea-power would win dominion.

It is interesting to ascertain what maps and information were available to the Portuguese explorers. In Chapter V reference is made to Idrisi's map, and a chapter has also been devoted to Ibn Battuta's journeys. Again, in 1413, the planisphere of Mecia de Viladestes shows the caravan routes from Egypt, which converged on Timbuktu. Generally speaking, there was better information available about the interior than about the west coast of Africa. There was, however, as the Laurentian Portolano in 1351 proves, a strong belief that Africa could be circumnavigated, but there was little if any definite knowledge concerning the western coast south of the equator. As regards the east coast, Idrisi and other Moslem travellers knew of the ports of Zeila, Mombasa, Kilwa and Sofala, on which were based petty states founded by Arabs in the eighth century A.D., while Persians ruled at Malindi.

In 1487, the year after Diaz sailed, King John sent Covilham "to discover and learn where Prete Janni dwelt, and whether his territories reached unto the sea; and where the pepper and cinnamon grew. . . . They were further charged to find out whether it were possible to sail round the southern end of Africa to India and to gather information about sailing in the Indian Ocean." Covilham visited India, and then took ship to Sofala. Returning to Cairo, he sent home a report in which he stated that "the ships which sailed down the coast of Guinea might be sure of reaching the termination of the continent, . . . and that when they should arrive in the eastern ocean, they should inquire for Sofala". He then visited Abyssinia, where his abilities were so highly appreciated that he was permanently detained as a highly honoured guest. It is, of course, uncertain whether the Portuguese had all the above information at their disposal. Probably they had not.

It is difficult for us to realize to what an extent superstition barred the path of exploration at this period. To quote the contemporary historian Azurara:[1] "Said the mariners, this much is clear, that beyond this Cape of Bojador there is no race of men nor place of inhabitants: nor is the land less sandy than the deserts of Libya, where there is no water, no tree, no green herb—and the sea so shallow that a whole

[1] Vide *The Discovery and Conquest of Guinea*, by Gomes Eannes de Azurara, transd by C. R. Beazley and E. Prestage (Hakluyt Society), 1896.



PRINCE HENRY THE NAVIGATOR AS A KNIGHT OF THE GARTER
(From an old engraving in the British Museum)

[*face p.* 100

league from land it is only a fathom deep, while the currents are so terrible that no ship, having once passed the Cape, will ever be able to return." We may add to this the belief of Ptolemy that the torrid zone was uninhabitable and impassable.

Year after year Prince Henry despatched expeditions, whose leaders feared to sail southwards; but he never relaxed his efforts, and in 1434, after twelve years of exploration, the spell was broken by one of his squires and the fateful Cape Bojador was rounded with the utmost ease. During these years the island groups of Madeira and the Azores were rediscovered and colonized by Portugal, while Spain occupied the Canaries.

It must be borne in mind that in its northern section the west coast of Africa was, and is, most uninviting, the Sahara, arid, waterless and treeless, coming down to the ocean. Consequently explorers were repelled and were generally anxious to return home lest worse befall.

Azurara gives a valuable account of the experiences of John Fernandez, who volunteered to stay in the desert country. He described it as "peopled by shepherd folk in greater or smaller numbers, according as they find pasturage; and there are no trees in it save small ones. . . . And all the water is from wells." One of his most interesting remarks runs: "It is said that in the land of the Negroes there is another kingdom called Melli, but this is not certain." From this remark it would seem that the work of Ibn Battuta, who visited Malli, as told in the previous chapter, was unknown to the Portuguese historian.

Hitherto in these expeditions no natives of the country had been seen. Prince Henry was most anxious to secure captives, to convert them to Christianity and to utilize their services as intermediaries and interpreters. This was effected without much difficulty, and started a lucrative slave-trade, which encouraged the merchant class to support these ventures. The Portuguese captains pushed farther south mainly because the Moors became aware of these slaving raids, and it was therefore desirable to strike areas where they could surprise the wretched inhabitants. In 1446 they rounded Cape Verde, beyond which lay the Land of the Negroes or Guinea.[1] Here, even though unable to land owing to the rough sea, "it was clear from the smell that came off the land how good must

[1] The word is probably derived from Ghana, the name of the oldest known state in the Western Sudan, which, from various capitals, including Malli, during the Middle Ages ruled from the Atlantic to the great bend of the Niger. The English guinea was made from gold imported from this country in the reign of Charles II.

be the fruits of that country, for it was so delicious that from the point they reached, though they were on the sea, it seemed to them that they stood in some gracious fruit-garden ordained for the sole end of their delight".

Among the leading explorers of the period was Cadomosto, a Venetian. Entering the Portuguese service in 1455, he visited Madeira, and at Cape Branco began a study of the country, its inhabitants and its resources, charting the coast as he proceeded. He discovered the Cape Verde islands and reached the Gambia, where he opened trade with the natives. Altogether his report gives a better account of the geography, trade routes and people than does that of Azurara, whose history records nothing later than the events of 1448.

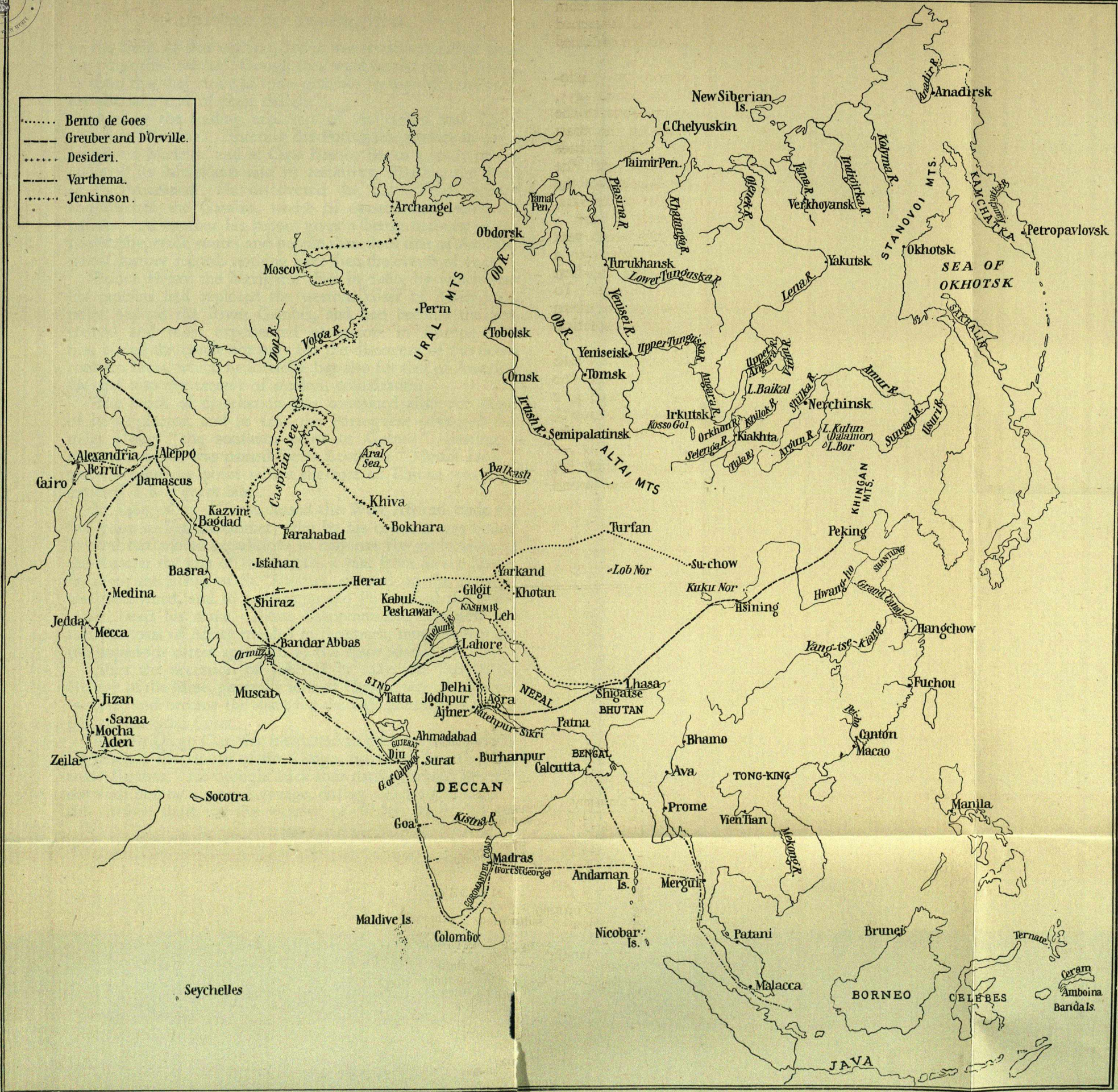
Prince Henry the Navigator died in 1460, by which year his captains had explored the western coast of Africa to a point beyond the River Gambia, and had become the best trained and most experienced navigators in Europe. To him is due the credit not only for the discovery of the ocean route to India, which he foretold, but also for that of America. He was also the creator of modern colonization.

The work of exploration was continued after the death of its originator, and in 1461 the Portuguese advanced 600 miles along "the southern coast of Guinea", passing a mountain which was named Sierra Leone or "Mount Lion", and reaching the point where the fort of Elmina was constructed a few years later.

In 1469, King Alfonso leased the West African trade for five years to Fernan Gomez, who by his contract was bound to send out annual expeditions to continue the exploration of the coast at the rate of 100 leagues a year from Sierra Leone. In 1470, the island of St. Thomas, situated on the equator, was discovered, and in 1471 Fernando Po reached the island which bears his name. Bitter disappointment was now felt that the coast of Africa trended to the south, thus lengthening the hoped-for direct approach to the spice islands of Asia.

After the accession of John II in 1481, the fort of St. George of the Mine, generally termed Elmina, was constructed in 1482, and became the mart for the rich goldfields situated behind the Gold Coast.

In 1484 Diego Cam was instructed to push on to the south. He reached the mouth of the Congo, up which he sailed for some distance. He brought back four natives, whom he took out with him on a second voyage, during which he penetrated still farther south to the vicinity of Walvis Bay. To his



ASIA, 1500-1800

(From J. N. L. Baker's *History of Geographical Discovery and Exploration*, by permission of Messrs. George G. Harrap & Co.)

[face p. 102

credit must be placed the exploration of over 1,400 miles of the coast of Africa: a notable feat, paving the way for final success.

In 1486, Bartholomew Diaz set out in the belief "that ships which sailed down the coast of Guinea might be sure to reach the end of the land by persisting in a southward direction". At Angra Pequeña he set up a pillar, a fragment of which I inspected at Cape Town. He then began to be affected by adverse currents, and putting well out to sea, sailed south before the wind into the Atlantic for thirteen days. He next shaped an easterly course, but not sighting land, he changed his direction to the north and landed at Mossel Bay, on February 3, 1488. Following up the coast, he reached the Great Fish River. There, realizing that he had fulfilled his mission to circumnavigate Africa, Diaz decided to return, and reached Lisbon in December 1488. By this splendid achievement the labours of Prince Henry the Navigator and his school of sea-captains were crowned with success. The ocean route to India had been proved practicable, a temperate zone to the south of the Tropics had been found, and it only remained to take advantage of these discoveries, which rank among the greatest feats of exploration.

Before describing the epoch-making voyage of Vasco da Gama and the remarkable feats of his successors, I propose to give an account of the important journeys of Ludovico di Varthema of Bologna,[1] whose knowledge of the Eastern countries was of the greatest value to the Portuguese. A soldier by profession and a born traveller, he starts his narrative with Egypt, which he considered to be too well known, and therefore he crosses into Syria. At Damascus he spent some months "in order to learn the Moorish language", and he describes the castle which was built by a Florentine Mameluke of the Sultan, who sculptured on it the arms of Florence.

At Damascus Varthema, in the spring of 1503, through the friendship of the Mameluke officer in command, was enlisted into that body, which escorted the pilgrim caravan to Mecca. After describing attacks by the Arabs on the huge pilgrim caravan, he gives an interesting account of the Jews of Khaibar, who were conquered by the Prophet Mohammed.[2]

[1] For this section I have consulted *Ludovico di Varthema*, edited by Sir R. Temple, Argonaut Press, 1928.

[2] Sykes, *History of Persia*, Vol. I, p. 518. Opposite p. 534 (2nd ed.) is a coloured reproduction of a miniature painting depicting Ali slaying Marhab, the champion of Khaibar.

According to our traveller, "If they can get a Moor into their hands they skin him alive." Varthema gives an accurate account of Mecca and of the ceremonies, which he was the first European to describe. He also notes that the Portuguese had already prevented the usual supply of spices from reaching the Mecca market.

When the pilgrimage was ended, Varthema, deserting from the Mamelukes, made his way to Jeddah, and, sailing down the Red Sea, reached Aden in March 1504. At this port he was thrown into prison on the charge of being a Christian spy, and since the Portuguese had captured some of their ships, the sailors who had escaped thirsted for his blood. He was brought before the Sultan for sentence, but ultimately, winning the affection of the Sultan's wife, Varthema was released from prison.

He then travelled to Yemen, and visited Sana, "situated on the top of a very large mountain and extremely strong". He also described Taiz, with its rose water and "all kinds of elegancies". Returning to Aden, everywhere following in the footsteps of Ibn Battuta, whose descriptions he most ably supplements, Zeila is visited and described as a mart for gold, ivory and Abyssinian slaves. His ship sailed thence to Diu, calling at Gogo in Kathiawar. Varthema crosses the Indian Ocean to Dhufar in the frankincense country, from which port Bertram Thomas, four centuries later, started on his successful attempt to cross the sinister *Rub'-al-Khali*. Coasting eastwards, Maskat is merely noticed, and the "noble city of Hormuz" was reached in the spring of 1504, or three years before its capture by Albuquerque.

From Hormuz Varthema made a journey into Persia in the summer of 1504, and "travelling for twelve days I found a city called Eri". This section of Varthema's journey has caused considerable discussion, but Eri certainly cannot be the celebrated city of Herat. During my first journey in Persia, I visited a rich oasis named Herat-i-Khara,[1] situated some five or six stages to the north-east of Shiraz, which was evidently the Eri of Varthema. From it he made for Shiraz, following the Eufra, which "I believe is the Euphrates, on account of its great size"—an amazing statement. Actually it is the Kur, which in its lower reaches is termed the Band-i-Amir, from a dam[2] constructed by an Amir in the tenth century. This word inspired Moore to write—

[1] *Ten Thousand Miles in Persia*, p. 78.

[2] For an illustration of this fine dam *vide* Sykes, *History of Persia* (2nd ed.), Vol. II, p. 24

"There is a bower of roses by Bendemeer's stream,
And the nightingale sings round it all the day long."

At Shiraz, Varthema met a wealthy merchant, *Khoja* Junair, whose acquaintance he had made at Mecca. He not only offered him his niece in marriage, but accompanied him on his voyages to India and the Far East. In the autumn the friends sailed to India, and Varthema gives a good description of its ports, which were also described by Marco Polo and Ibn Battuta. From Goa he travelled inland to Bijapur, which, using the name of the province, he terms Deccan. "The King of the said city lives in great pride and pomp. A great number of his servants wear on the insteps of their shoes rubies and diamonds."

Landing again farther south at Cannanore, Varthema visited Vijayanagar, the last Hindu empire in India, which "appears to me to be a second paradise. The King is a great friend of the Christians, especially of the King of Portugal." In his description of Calicut he mentions that if the "untouchables", to give them their modern name, fail to give notice of their polluting presence, the Brahmins or Nairs may kill them.

In discussing the "manner of navigation" at this point Varthema explains that "they make their vessels, such as are open, each of 300 or 400 butts", thus proving that, as in the case of our "tonnage", measurement of capacity was based on the number of "tons" or "casks" that could be carried. *Khoja* Junair "could not sell his merchandise because Calicut was ruined by the King of Portugal", and so the travellers continued their voyage in January 1595 to Quilon, Ceylon and the Coromandel Coast. They then crossed the Bay of Bengal to Tenasserim. Again the name of the country is used for the town, and a list is given of the domestic and game animals and birds.

Bengal was the next country to be visited. It struck Varthema as "abounding more in grain, sugar, ginger and cotton than any country in the world". There they met some Nestorian Christians, inhabitants of Siam, who joined forces with them, and the party sailed to Pegu. The King, who was visited at his camp fifteen days inland, gave *Khoja* Junair rubies in exchange for his coral, and Varthema described the enormous quantities of jewels worn by the monarch, "whose ears hang down half a palm, through the great weight of the many jewels he wears". He also noted the "canes which were really as thick as a barrel", this being a reference to the giant bamboo.

From Pegu the travellers sailed to Malacca, where they arrived in the spring of 1505. Varthema mentions an "extremely great strait . . . and opposite there is a very large island, which is called Sumatra". This is a reference to the Straits of Singapore, and the earliest mention of Sumatra under that name, Marco Polo and Ibn Battuta calling it Java the Less. Varthema testifies to the enormous trade of Malacca, which four years later was visited by Sequeira. Owing to the lack of security at Malacca, the travellers proceeded to Sumatra, where Varthema revelled in its wonderful perfumes.

From the point of view of exploration Varthema's account of his voyage to Banda and the Moluccas is of the greatest importance, for he was the first European to reach these famous Spice Islands. He was unfavourably impressed by Banda, "which is very ugly and gloomy. . . . Nothing grows here but nutmegs and some fruits." Of the nutmeg he gives a good account, but the people he describes as being "like beasts without understanding". From Banda the travellers sailed on for twelve days to Monoch (Moluccas). "Here the cloves grow. The tree of the clove is exactly like the box tree."

It is curious that Varthema failed to realize the importance of his discoveries. Indeed throughout he apparently made no effort to profit by his wonderful opportunities of amassing wealth. Sir Richard Temple considers that the small island at which Varthema studied the clove trees was Ternate, and, as we shall see, it was at Ternate that Drake secured a cargo of cloves.

The untiring travellers had now reached the eastern limit of their wonderful voyages. Sailing westwards on the return journey, and approaching Java, we find a most remarkable passage: "The captain of the ship showed us four or five stars, among which there was one which he said was opposite to our north star. . . . He also told us that on the other side of Java, towards the south, there are some other races, who navigate by the said four or five stars opposite to ours." The reference is to the Southern Cross, and the extraordinary importance of a statement showing acquaintance with navigation in seas still farther south is manifest.

Upon his return to Calicut in the summer of 1508, Varthema determined to join the Portuguese at Cannanore. This he effected with some difficulty, and was able to give information of the greatest value about the fleet that was being assembled at Calicut to attack the Portuguese. Varthema gives a vivid

description of the sea-fight off Cannanore. Subsequently he was appointed factor by the Viceroy, and held this post until the autumn of 1507. The great traveller was now anxious to return home, and having been knighted by the Viceroy—Tristan d'Acunha was his sponsor—he sailed to Europe with the Portuguese fleet, and arrived safely at Lisbon in the autumn of 1508.

Doubt has been thrown on the reliability of Varthema's accounts, but for me he is a great explorer possessing the true traveller's spirit and endowed with excellent powers of observation and criticism. The value of the information he was able to give the Portuguese must have been priceless.

CHAPTER XII

VASCO DA GAMA SAILS TO INDIA

"To their triumphant arms, the Chersonese
In golden treasures rich, distant Cathay,
And all the farthest Islands of the East,
And all the seas, to them shall homage pay."
CAMOENS, "*The Lusiad*".

VASCO DA GAMA won deathless fame by making the first ocean voyage to India. It was the culmination of nearly a century of persistent effort by Portuguese navigators, and represented a great epoch in exploration.

The famous Captain was born in 1460 at the small fishing town of Sines, set in a waste of barren dunes, which impelled its inhabitants to reap the harvest of the sea. Well equipped as a scientific navigator, and an experienced mariner, he was thirty-six years of age, unmarried, ambitious, and capable when appointed to command this important expedition. He was fortunate in having two ships, each of 120 tons, specially constructed for the voyage by Bartholomew Diaz, whose experience must have been invaluable, and the squadron was completed by a *caravel* of fifty tons and a store ship of 200 tons. The expedition consisted of about 170 officers and men.[1]

On July 8, 1497, the explorers started on their momentous voyage and were favoured by good weather as far as the Canaries. Then came a dense fog, during which the various ships lost touch with one another, but regained it at the Cape Verde Islands. Instead of painfully creeping along the coast, as his predecessors had done, Da Gama boldly shaped a course across the Atlantic to the Cape of Good Hope. The direct distance to be covered was nearly 4,000 miles, but his course, which involved spending more than three months out of sight of land, was considerably longer, and constitutes one of the greatest achievements hitherto recorded in the annals of maritime exploration. Passing well to the west of Ascension and St. Helena, Da Gama finally sailed due

[1] See *Vasco da Gama*, by K. G. Jayne, and *Vasco da Gama's First Voyage*, by E. G. Ravenstein (Hakluyt Society), 1898. The latter work includes a translation of a *roteiro* or journal, kept by an unknown writer.

east to avoid missing Cape Agulhas, and sighted land, which he followed down to a bay, named by him Santa Helena.

Upon landing, he made the acquaintance of some Hottentots, whose food consisted of the flesh of seals, whales and gazelles, together with the roots of herbs. At first relations were friendly, but, possibly owing to a misunderstanding, assegais were thrown, one of which slightly wounded the Captain-Major. Continuing the voyage, he rounded the Cape of Good Hope, not without some difficulty, and, like Diaz, landed at Mossel Bay, to which Da Gama gave another name. There "we remained for thirteen days. We broke up our store-ship and transferred her contents to other ships." The natives possessed fine oxen and sheep, but were none too friendly, and the pillar which the Portuguese erected was demolished under their eyes as they sailed away.

Upon resuming the voyage, the distances are given with remarkable accuracy, and Vasco da Gama sailed past the Rio de Infante or Great Fish River, the last discovery made by Diaz. But, owing to the strong Agulhas current, the explorer was carried back to Santa Cruz, an island in Algoa Bay. Fortunately a strong wind astern overcame these currents, to the intense relief of all.

Vasco da Gama had some 800 miles of unknown coast to explore before reaching the Moslem ports, where he hoped to engage pilots. By Christmas Day he had discovered seventy leagues of coast, to which he gave the name of Natal. Farther north, he landed near the mouth of the Limpopo, where the Portuguese were hospitably received by the Bantu tribesmen, who were armed with "long bows and arrows and spears with iron blades". Copper appeared to be plentiful, for which reason Vasco da Gama named the Limpopo the "River of Copper". The Bantu country he called the "Land of the Good People".

Sailing steadily northwards, and passing Sofala on January 22, Da Gama entered the Kiliman River, where he gained touch with Moslem civilization in the person of a young man "who had come from a distant country, and had already seen big ships like ours". The first Moslem port Vasco da Gama entered was Mozambique, where he found four Arab vessels "laden with gold, silver, cloves, pepper, ginger, and silver rings, as also with quantities of pearls, jewels, and rubies. We were told moreover that Prester John resided far in the interior, and could be reached only on the back of camels." The Sultan visited the Portuguese ships, but treated

with contempt the presents they offered, and asked for scarlet cloth, of which they had none.

It is to be noted that when the Portuguese appeared in Eastern waters, the carrying trade in the Indian Ocean and the Malay Archipelago was in the hands of the Arabs. They were not only carriers, but in India and Iraq they were merchants, as the *Arabian Nights* prove. They had founded petty states along the east coast of Africa, but in India, although their influence was considerable, they did not attempt conquest.

At first the relations of the Portuguese with the Sultan and his people were friendly, since it was believed that the newcomers were Moslems. Da Gama set sail from Mozambique, but, owing to the state of the wind, he was obliged to return to the port. The Portuguese proceeded to the watering-place on the mainland where hostility was shown them. Accordingly they bombarded the palisades which had been erected, and later captured some vessels and took some prisoners.

On March 29, having secured two Arab pilots who were accustomed to the use of the compass, the quadrant and charts, they sailed for Mombasa, where an attempt was made to capture the ships by a midnight surprise. As at Mozambique, the knowledge that the Portuguese were Christians created intense hostility, which was fully reciprocated. However, vigilance frustrated all treacherous attempts, and the fresh fruit restored the health of the sailors, who were suffering from scurvy.

From Mombasa it was only a day's sail to Malindi, where they were received in a most friendly manner by the King, who belonged to a Persian family. A Hindu pilot was provided, to the great satisfaction of the Portuguese, who one and all throughout this expedition believed that the Hindus were Christians. The town of Malindi was compared with Alcochete, a town situated on the Tagus above Lisbon: "Its houses are lofty and well whitewashed, and have many windows; on the land side are palm-groves, and all around it maize and vegetables are cultivated."

Da Gama left Malindi on April 24, bound for Calicut. "After having seen no land for twenty-three days, we sighted lofty mountains, and having all this time sailed before the wind, we could not have made less than 600 leagues." On May 20, 1498, the squadron anchored two leagues from Calicut, and thus the great feat of exploration was accomplished.

Vasco da Gama visited the *Samuri*. Stopping on the

way to the palace, "they took us to a large church. Many saints were painted on the walls of the church, wearing crowns. They were painted variously, with teeth protruding an inch from the mouth, and four or five arms." Yet the Portuguese still persisted in the fond belief that they were among Christians!

The *Samuri* was inclined to be friendly at first, but, partly owing to Da Gama being unprovided with suitable gifts and partly owing to Moslem intrigues, the situation finally became strained, and it was with some difficulty that the Captain-Major was able to return on board. Finally, after seizing some "six persons of quality" to serve as hostages, the Portuguese who had been arrested on shore were sent back.

Da Gama then set sail on the return voyage. Three months were spent in reaching Africa, during which period thirty men died from scurvy, making a total of sixty men or one-third of the whole number who had died from this dire scourge. When they sighted land they found that they were off Magadoxo—the Magdashaw of Ibn Battuta—and on January 7, 1499, they reached friendly Malindi. Owing to his terrible losses in personnel Da Gama was obliged to burn the *St. Raphael*, but, once the east coast of Africa was struck, the homeward journey was prosperous and a direct course was taken from the Cape of Good Hope to the Cape Verde Islands. Finally, after an ocean voyage of two years, during which 24,000 nautical miles had been sailed, the great expedition reached Lisbon in July 1499.

The Portuguese lost no time in following up this wonderful achievement, and in March 1500 a powerful fleet of thirteen ships sailed under the command of Pedro Alvares Cabral. Keeping farther to the west than Da Gama, on April 22 he struck the coast of Brazil, which had been discovered by Amerigo Vespucci, as described in the following chapter. Upon his arrival in India, Cabral founded a factory at Calicut. The Moslems, however, stormed it and killed the Portuguese, whereupon Cabral bombarded Calicut. He then established a factory at the neighbouring port of Cochin, whose ruler was an enemy of the *Samuri*. Loading his fleet with pepper, and leaving a squadron to cruise along the east coast of Africa, Cabral reached Lisbon in the summer of 1501, with the most valuable cargo that had ever enriched Portugal.

In 1505, Francisco d'Almeida sailed in command of a powerful fleet to take up the important post of first Viceroy of India. He realized that the Portuguese position rested

on sea-power and was opposed to annexation of territory. He would certainly have approved of Bacon's maxim "that he that commands the sea is at great liberty, and may take as much and as little of war as he will". Almeida's policy aimed at securing the whole of the carrying trade for Portugal by ousting the Moslems from the Indian Ocean.

His ability to pursue this ambitious policy was challenged in 1506 by a powerful fleet composed of Arab Moslems and Hindus, which had been assembled by the *Samuri* at Calicut. News of the impending attack was brought by Varthema, who had escaped from Calicut disguised as a Moor, and upon receiving it the Portuguese, under Lorenzo, Almeida's heroic son, attacked and utterly defeated the Indians, inflicting crushing casualties. Egypt had next to be reckoned with, and in 1508 her fleet surprised a small Portuguese squadron off Chaul, killing Lorenzo, and then took up a position in the island port of Diu. In 1509 the Portuguese attacked. The fight between the two forces raged with fury, but finally Almeida could rejoice over "the good vengeance Our Lord has been pleased, of his mercy, to grant us".

In 1509 a squadron reached India under Diego Lopes de Sequeira with orders to reconnoitre Malacca. It was joined by Magellan, and passing Ceylon, steered for Sumatra. The Portuguese were the first European navigators in these seas, which Marco Polo and Varthema had described, and Sequeira, after concluding a treaty with a local chief in the northern part of Sumatra, proceeded to Malacca, which he reached in September 1509. This port was crowded with shipping from Arabia, Persia, Gujerat, Bengal, Burma, Java, China and the Philippine Islands, and the volume of its trade amazed the Portuguese. Their arrival at first caused a panic, but apparently friendly relations were established and the Portuguese arranged to load their ships with spices. The Malay ruler, however, determined to kill them, and the plot nearly succeeded, but Sequeira was warned just in time and sailed away, leaving some of his men prisoners.

Almeida was succeeded by the great Albuquerque in 1509. A man of vast ambitions, he determined to occupy Goa as a naval base and to make it a Portuguese town. He also understood that, to cut the Moslem arteries of commerce, he must hold both Aden and Hormuz. Finally he realized that Malacca was the key to the commerce of the Far East.

Albuquerque wisely made the seizure of Goa his first objective, and in this he succeeded, after a severe reverse, in

1510. In the following year he captured Malacca, thus securing the key to the Eastern Gate of the Indian Ocean and the control of the Spice Islands. After the fall of Malacca, a Portuguese squadron cruised in the Malay Archipelago. No account of this memorable voyage has been preserved, but it included the chief islands and reached the important clove centre of Amboina.

Trade rapidly followed the flag. The Portuguese landed in China in 1516, and within a generation there was an important colony established in that country. In 1542, commercial relations were opened up with Japan. Embassies were also despatched to Siam, where the Portuguese settled in considerable numbers, and to Burma. Upon his return to India in triumph, Albuquerque found that Goa was once more being besieged. Again there was desperate fighting, but Albuquerque gained the victory, and definitely secured Goa for Portugal.

In 1513 Albuquerque set sail for Aden, which was a strong natural position and strongly fortified. He decided on an attack by escalade. Everything, however, went wrong. The water was so shallow that the soldiers were obliged to wade ashore, wetting their powder, and the ladders were too short. The Portuguese, in spite of heroic efforts, were repulsed with heavy losses in men and in prestige. A cruise was then made to Kamaran Island in the Red Sea, where the lack of food and the heat added to the losses sustained at Aden.

Some years earlier, in 1507, Albuquerque had sailed from Socotra with a squadron of seven ships to attack Hormuz. He followed the Oman coast, sacking the ports and mutilating his prisoners of both sexes in order to inspire fear. At Hormuz he attacked the ships which he found in the harbour, but no resistence was offered, their cowardly crews swimming to the shore. The boy-King submitted, and agreed to pay tribute. At this juncture the representative of Shah Ismail appeared on the coast and demanded the tribute due to Persia. Albuquerque provided the boy-King with cannon-balls, matchlocks and grenades, bidding him to send these and to say that this was the currency in which tribute would be paid. He then set to work to build a fort, but the disloyalty of his captains forced him to retire from the scene—for a while. In 1515 he returned as Viceroy with a powerful fleet. He met with no opposition, and erected the splendid fort which at a recent date was practically intact, while

numerous cannon lying about bore mute witness to the stormy past.[1]

Albuquerque had failed before Aden, and in 1538 a Turkish fleet consisting of sixty-six ships with 20,000 troops sailed from Egypt [2] to India and besieged the Portuguese garrison in Diu fort. By dint of heavy bombardments and repeated assaults, the fortress was nearly taken, when the Turks, who had quarrelled with the Sultan of Gujerat, suddenly sailed back to the Red Sea, leaving the Portuguese in undisputed possession of the Indian Ocean, and never reappeared on the scene.

It now remains to sum up the results of the explorations of the Portuguese in Eastern waters. During the Middle Ages spices, perfumes and incense, on which Europe depended for her luxuries and, in the case of incense, for her religious ceremonies, reached her through Moslem countries, the two arteries of commerce being the Red Sea and the Persian Gulf. The duties levied on this trade were enormous. In practice, the Sultan of Cairo took one-third of the value of every cargo that entered Egypt. In addition customs were charged on the importers, and in the *Roteiro* we learn that the customs paid by the Venetians and Genoese alone were estimated at £300,000—a huge sum in those days. As a result of the Portuguese operations we read that, in 1504, the Venetian merchants could purchase no spices at Alexandria or Beirut. The arteries of commerce up the Red Sea and the Persian Gulf had been effectually cut.

The Portuguese had indeed fulfilled the hope of Henry the Navigator, far more completely than that great man had dared to expect, and had justified the paean of triumph quoted in the motto to this chapter. Of even greater importance was the shifting of sea-power and world domination from the Mediterranean, that great nursery of maritime development, to the states bordering on the Atlantic. This process was completed by the discoveries of Columbus.

[1] *Vide* Sykes, *History of Persia* (2nd ed.), Vol II, p. 186, for an illustration of the fort.

[2] Selim the Grim had annexed Syria and Egypt in 1517.

CHAPTER XIII

CHRISTOPHER COLUMBUS DISCOVERS THE NEW WORLD

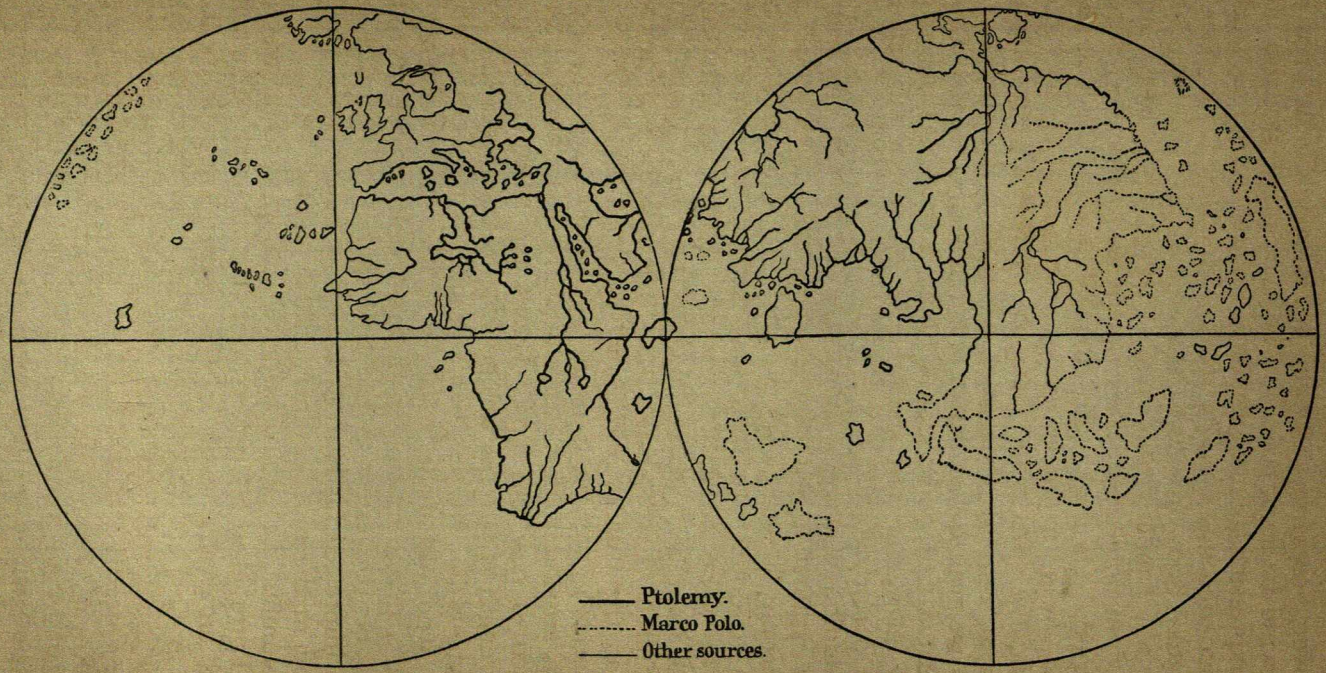
> "I wrote this to you from which you will learn how in thirty-three days I passed from the Canary Islands to the Indies. And there I found very many islands filled with people innumerable, and of them all I have taken possession."
>
> *Letter of Columbus.*

THE discovery of the New World by Christopher Columbus was undoubtedly the greatest event in the history of exploration. There have been many conflicting accounts as to the hero of the enterprise, but it is now generally accepted that he was born in 1451 at Genoa, where his family were weavers.[1] Owing to his humble birth he had little or no education in his youth, and was illiterate, as indeed was to be expected. The fact that he used Castilian even when writing to Italians proves that he had learned to write after leaving his country.

At first Columbus worked as a weaver, but in 1475 he made his first voyage to Chios, at that time a possession of Genoa, and resided there for some time. In 1476 he took part in a Genoese trading voyage to Lisbon, England and Scotland. In 1477 he settled at Lisbon, where he married the daughter of a deceased sea-captain who had served Prince Henry the Navigator, and had been appointed Hereditary Captain of Porto Santo, Madeira's little neighbour. He spent some time at this island and at Madeira, and acquired literacy and some smattering of the science of the period. He also claimed to have been present when Diaz gave an account of his wonderful voyage to the King of Portugal.

His scientific views were those of the Middle Ages. Chief among his few books was the *Imago Mundi* by Cardinal Pierre d'Ailly, written about 1410. To quote one passage: "Aristotle says that the sea is little between the farthest bound of Spain from the East and the nearest of India from the West.

[1] I have consulted *The Great Age of Discovery*, edited by A. P. Newton, 1932, *Histoire critique de la grande entreprise de Christophe Colomb*, by Henri Vignaud, 1911, *Letters of Christopher Colombus*, by R. H. Major, 1870, and *Select Documents illustrating the Four Voyages of Columbus*, by Cecil Jane (Hakluyt Society), 1933.



BEHAIM'S GLOBE AND ITS SOURCES.

Moreover, Seneca says that this sea is navigable in a few days if the wind be favourable." There are other passages in the work expressing similar views, and Columbus not only studied, but annotated this standard work of the time. His copy has fortunately been preserved, as also has his "Marco Polo", which was similarly annotated. These views, based almost entirely on conjecture, are naturally shown on the maps of the period. On the famous globe of Behaim, which appeared in 1492, owing to the enormous extension given by Ptolemy to Asia, the space intervening between Spain and China is shown at 130° of longitude, whereas it is actually 230°. When we realize that Japan was reported by Marco Polo to be situated 1,500 miles east of China, it may be realized how utterly inaccurate were the premises on which the explorers of the period worked.

Columbus had made more than one voyage, and had discussed exploration with the captains and sailors, and "with wise people, as well clergy as laity".[1] Moreover, there is no reason to doubt that there was truth in the reports of "a piece of wood artificially worked" picked up 450 leagues west of Cape St. Vincent, and of "very large canes" found on the shore of Porto Santo, and other indications of unknown lands in the Atlantic mentioned by Las Casas.[2]

Brooding over these matters, Columbus gradually decided that his mission in life was to sail westward across the Atlantic to discover new and fertile islands and to reach the Indies. His strength of purpose was not due to any special knowledge of navigation. He was not a seaman but a very intelligent trader who had made voyages. Rather he considered that he had a divine mission to discover lands whose inhabitants should be converted to the true faith. It was this belief which impressed his hearers, who were ready to see the hand of God in the most ordinary affairs of life.

Columbus, in the first instance, attempted to interest John II of Portugal in his project, but that monarch's Council reported unfavourably on it. He consequently proceeded to Spain in 1484 and joined his brother, who was a map-maker and in touch with explorers. In 1486, he presented himself before Queen Isabella at Cordoba, who referred the question to a Royal Commission which decided against his scheme. Isabella did not throw over Columbus, but, in view of the fact that Spain was devoting all its resources to completing

[1] *Ferdinand Columbus*, pp. 506–7.
[2] *Historia de las Indias*, Lib. I, Cap. XIII.

the expulsion of the Moors, she decided that the moment was not opportune for undertaking new commitments. Columbus retired to the monastery of La Rabida, where the Prior was his friend and supporter, and where one of the monks was a cosmographer. While staying there he met Martin Alonso Pinzon, a leading navigator of the neighbouring port of Palos, who had decided to undertake an expedition to the island of Chipangu or Japan, and had been seeking information on the subject at Rome.

Columbus again tried to interest Portugal in his enterprise, but without success, nor would Henry VII of England take it up; but upon the capture of Granada in January 1492, which marked the final defeat of the Moors, Isabella sent for Columbus and informed him that she had decided to support his project.

On August 3, 1492, Columbus sailed from the port of Palos on his memorable voyage. His flag was hoisted on the *Santa Maria*, a decked vessel of 100 tons, and two *caravels* of fifty and forty tons respectively were commanded by Martin Pinzon and his brother. The question arises of the exact objective of Columbus. Did he believe that he would find Chipangu or Japan,[1] which was inaccurately described by Marco Polo as being situated 1,500 miles east from China? Martin Pinzon undoubtedly enlisted men for a voyage to Chipangu, and, accepting the views expressed in the *Imago Mundi*, Columbus apparently sailed in the belief that he would find Chipangu and, later, strike the east coast of Asia. He also vaguely hoped to discover and annex unknown lands and islands.

From Palos he shaped his course for the Canaries in fine weather, the only cause of anxiety being that the rudder of the *caravel Pinta* became unshipped, "possibly by contrivance of its owners".[2] On August 9 the Canaries were sighted, and Gomera was reached on September 2, with the *Pinta* repaired. "Having taken in water, wood and meat", the voyage was resumed on September 6. The weather remained favourable, "like April in Andalusia", with the north-east trade winds wafting the squadron steadily to the west. Entering the Sargasso Sea "they saw much very fine grass and herbs

[1] In view of the importance attached to Chipangu, I quote from the account given from hearsay by Marco Polo: "You must know that the Lord of this island has a very large palace, all covered with fine gold. Just as we roof our houses and churches with lead, so this palace is all roofed over with fine gold. . . . And all the other parts of the palace, namely the halls and the windows, are similarly adorned with gold."

[2] *The Journal of Christopher Columbus*, by Sir C. Markham (Hakluyt Society), 1893.

KING FERDINAND DESPATCHES SHIPS TO DISCOVER NEW ISLANDS
(*From a woodcut in the First Account of the Voyage of Columbus, by Guiliano Dati,* 1493)

[*face p.* 118

from rocks which came from the west". The sight of this weed-covered sea must have strengthened the belief of the explorers in the proximity of land. Numerous birds were also sighted flying westward. On October 7, acting on the advice of Martin Pinzon, who was probably influenced by the flight of the birds, Columbus changed his direction from west to west-south-west.

The mutinous behaviour of the sailors, who were afraid they would never see Spain again, threatened the success of the enterprise, but, by lessening the actual length of the run in the log and by temporizing, Columbus was able to continue the voyage. On October 11, thirty-three days after leaving the Canaries, he sighted land. Columbus had not reached the Indies, as he believed, but had discovered a New World.

On the morning of October 12, 1492, Columbus landed in state on the small island of Guanahani, one of the Bahamas, which he solemnly annexed to Spain and named San Salvador. On continuing the voyage, a week was spent among the islands of the Bahama Archipelago, and on October 28 the important island of Cuba was reached, which Columbus at first "thought it must be the mainland, the province of Catayo (Cathay)". An expedition penetrated inland, during the course of which tobacco was discovered. Columbus then sailed on to the modern Haiti, which he told his officers was Chipangu, but which he named Española, while Cuba was pronounced to be part of the continent of Asia. His description of Española runs:

> "In it there are many harbours on the coast of the seas, and many rivers, good and large. Its islands are high, and there are very lofty mountains. All are most beautiful, of a thousand shapes, and all are accessible and filled with trees of a thousand kinds and tall, and they seem to touch the sky. And some were flowering and some bearing fruit. And the nightingale was singing, and other birds of a thousand kinds. There are six or eight kinds of palm, which are a wonder to behold on account of their beautiful variety."

Of the inhabitants he wrote:

> "The people all go naked, men and women. They have no iron or steel or weapons, nor are they fitted to use them, not because they are not well built men, but because they are marvellously timorous. They are so guileless and generous with all they possess, that no one would believe it who has not seen it.
>
> "There was one large town in *Española* of which especially I took possession, situated in a locality well adapted for the working of the gold mines, and for all kinds of commerce, either with the mainland

on this side, or with that beyond which is the land of the Great Khan. To this city I gave the name of *Villa de Navidad* and fortified it." [1]

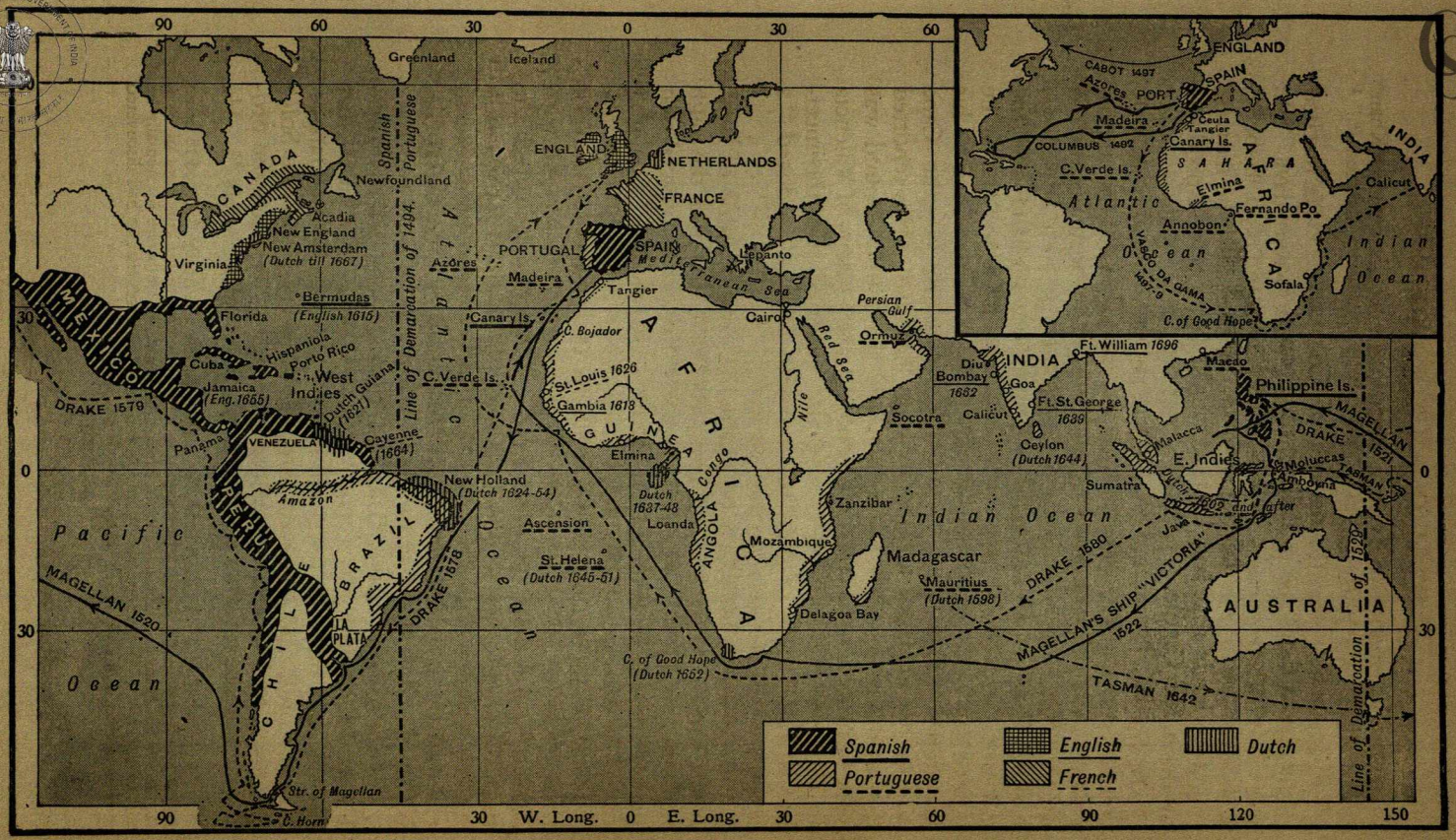
Columbus started homeward in January 1493. He reached the Azores after a prosperous voyage of thirty-four days. He was warmly welcomed in Spain by Ferdinand and Isabella, who received him in full court, when he exhibited the natives, together with the unknown birds, beasts and vegetable products of the Indies.

In his second voyage Columbus shaped a more southerly course, and on a Sunday struck an island which he appropriately named Dominica. Many other islands were discovered on the way to Española, where he found that *Villa de Navidad* had been attacked by natives from another island and the garrison massacred. He founded a second town which he named Isabella. In his third journey Columbus added to his wonderful discoveries. He shaped a course to the Cape Verde Islands, and struck land at Trinidad. He reported "houses and people on the spot, and the country round was very beautiful, and as fresh and green as the gardens of Valencia in the month of March". He also reported that the meeting of the waters of the Orinoco with the sea produced "a sound as of breakers on the rocks".

From Trinidad, when he noted the great volume of fresh water pouring into the sea from the Orinoco, and the high mountains that he sighted to the west, he was convinced that he had found a land of infinite extent. He reached "a country called Paria, one of the most lovely countries in the world. The inhabitants came to the ship in their canoes, many of them wearing pieces of gold on their breasts, and some with bracelets of pearls on their arms". But he destroyed the importance of this discovery by the fantastic interpretation he put upon it. He returned to Europe discredited and in chains in 1500, and although kindly treated by Queen Isabella, his credit at court was never regained.

In his fourth voyage, Columbus steered south from Jamaica. He landed upon the coast of Veragua, where he believed that he was only nineteen days' sail from the mouth of the Ganges, but he could find no strait through which to reach the Spice Islands. In his report he claimed to have "reached the province of Mangi, which is contiguous to that of Cathay". He

[1] There are differences of opinion as to whether Cuba was finally believed to be an island by Columbus or whether he considered it to form part of the continent of Asia. Again, which island did Columbus "officially" hold to be Chipangu? Actually he was utterly bewildered, and the one thing he failed to grasp was that he had discovered a new world.



WORLD EXPLORATION AND COLONIZATION FROM COLUMBUS TO TASMAN.

(*Reproduced from "The Universal History of The World", edited by J. A. Hammerton, by courtesy of the publishers, The Educational Book Co. Ltd.*)

returned to Spain in 1504, a worn-out and disappointed man, and died two years later.

To secure the discoveries of Columbus, Queen Isabella applied to the Pope to delimit the Spanish sphere. Alexander VI thereupon issued a bull in 1493 laying down a line a hundred leagues west of the Azores, beyond which the ocean, and all lands that had been or might be discovered, were reserved for Castile. John II protested, and, by the Treaty of Tordesillas, negotiated in 1494, Spain and Portugal accepted a line drawn 370 leagues west of the Cape Verde Islands [1] as the line of demarcation, and thus divided the world outside Europe, threatening severe penalties to all intruders. In 1529, after the voyage of Magellan, by the Treaty of Saragossa, the line of demarcation in the Pacific was fixed as the continuation round the globe of the line drawn in the Atlantic. This monstrous treaty, which gave the monopoly of the East and West to Portugal and Spain respectively, was challenged by England and other European Powers as soon as they were in a position to do so. Incidentally, as we shall see, it was the main cause of the exploration of the North-East and North-West Passages.

Until quite recently the great achievements of the Florentine Amerigo Vespucci, who gave his name to the New World, have been obscured [2] by the uncertainty that prevails about them. According to his own account in his *Letters*, he sailed from Cadiz in May 1497 "towards the Great Gulf of the Ocean Sea". Apparently this voyage of discovery included the coast of Honduras and the Gulf of Mexico. In any case, he returned safely to Spain in the autumn of the following year with a cargo of 222 slaves. In his second voyage Vespucci struck Brazil. He then sailed north-west to the mouth of the Amazon, which he explored for some distance.

In his third voyage, he set sail from Lisbon in 1501, and explored the east coast of South America from latitude 5° to latitude 50°. In January 1502, a wide opening was discovered, and named Rio de Janeiro. Heawood considers that the names given to points on the coast of Brazil are derived from Saints' days which fell during Vespucci's presence in these waters, and this fact incidentally strengthens our belief in the genuineness of the exploration. He certainly prepared the

[1] *Vide* "The World Map before and after Magellan's Voyage", by E. Heawood, *Geographical Journal*, Vol. LVII, 1921.

[2] Vide *Amerigo Vespucci*, by A. Magnaghi, 1924. This work is judicially summarized in "A New View of the Vespucci Problem", by E. Heawood, in the *Geographical Journal*, Vol. LXVI, p. 339; also in *The Great Age of Discovery*, by A. P. Newton, 1932.

way for Magellan, who refers to Vespucci as his predecessor. This exploration was undertaken in the service of Portugal, but Vespucci subsequently returned to the service of the King of Spain, and his influence on Spanish exploration and cartography alike were paramount. It is a great pity that no detailed account of these important voyages has come down to us.

So far no mention has been made of English participation in the field of ocean exploration. There had been commercial relations with Portugal and Spain for many centuries before Columbus sailed across the Atlantic. Bristol was the centre for this trade, whereas London and Southampton dealt chiefly with Venice and Genoa. Bristol also traded with Iceland from the fifteenth century, exporting cloth, wool and salt, and bringing back fish and "occasionally consignments of volcanic brymston".[1] Owing to this intercourse, it is probable that the expeditions of the Norsemen to North America were known in Bristol. In 1480, John Jay of Bristol despatched a ship to discover the island of Brazil, which was believed to be situated not very far from the west coast of Ireland. The venture was of course a failure, and indeed, cruising to find a non-existent island prevented English explorers from sailing across the Atlantic. At the same time voyages to Iceland and elsewhere trained English seamen, and John Cabot was destined to be their successful leader in the field of exploration. Of Cabot little is known for certain until, in 1476, he was granted the privilege of Venetian citizenship. While living in Venice he was engaged in the eastern trade, and on one occasion he crossed the Isthmus of Suez and reached Mecca, which at that time was an important centre of the spice trade. He was a merchant rather than a seaman, but was a skilled navigator with a sound knowledge of geography.

Cabot came to England at some unknown date between 1484 and 1490 and settled at Bristol. There he interested the merchants in his scheme for crossing the Atlantic and discovering new lands, with the result that Henry VII was approached, and, after negotiations, a patent was issued in March 1496 by the terms of which Cabot was to sail under the English flag "to all parts, regions and coasts of the eastern, western, and northern sea", and to make discoveries in parts of the world hitherto unknown to Christians and occupy them

[1] My chief authority for Cabot is *The Voyages of the Cabots*, by James A. Williamson, Argonaut Press, 1929.

in the King's name. This patent, which undoubtedly infringed the Treaty of Tordesillas, constitutes a proof that Henry VII did not intend to allow Spain and Portugal to divide the Atlantic and the new lands that it washed between themselves. He proposed to have a share, but, to avoid throwing down the gauntlet to Spain, this discovery must be of "heathen islands or countries hitherto unknown to Christians". It must also be made in the latitude of England, that being the area Henry VII intended to stake out for his country.

Cabot sailed on his great voyage of exploration on May 2, 1497. The best account of it is given in a letter, from which I quote.[1]

> "He started from Bristol, a port on the west of this kingdom, passed Ireland, which is still further west, and then bore to the north. . . . After having wandered for some time, he at length arrived at the mainland, and after taking certain tokens he returned. . . . They assert that the sea there is swarming with fish, which can be taken not only with the net, but in baskets let down with a stone. I have heard this Messer Zoane Caboto state so much."

It appears that the outward voyage took fifty-four days, and there is no certainty as to the point where Cabot touched the New World; but Williamson considers that he struck Cape Breton. He was certain that he had reached the mainland of Asia, but being steeped in the account given of China and Japan by Marco Polo, he considered that he had landed to the north of these civilized countries. He hoisted the flags of England and of St. Mark of Venice, and then sailed along the coast to observe its south-westerly trend for some 300 leagues. He saw no inhabitants, but had proof of their existence, picking up some snares set for game and similar trifles. Before sailing for home, two islands were sighted, but supplies were running short, and no delay was permissible on what was intended to be a reconnaissance. All went well on the homeward journey, and the explorers reached Bristol on August 6. John Cabot immediately proceeded with the Bristol merchants to London, where he was well received by Henry VII.

A second expedition was immediately organized, consisting of five ships, which sailed in May 1498. Cabot's purpose was to follow the coast southwards to the spice regions adjoining Chipangu. One of his ships was damaged, but the others

[1] This delightful letter was written by a certain de Soncino to the Duke of Milan on December 18, 1497.

reached the New World safely. Cabot then sailed southwards, surveying the coast as he went. Williamson in dealing with the extent of Cabot's exploration on these two voyages refers to the map of Juan de la Cosa which was drawn in 1500. He shows that, in the 1497 voyage, Cabot missed Newfoundland in the outward passage and struck land near Cape Breton. Sailing along the coast of Nova Scotia, he crossed the Bay of Fundy to Maine, a point which, in view of the width of the bay, might well be termed *Cavo Descubierto* or "Cape Discovered". On the homeward voyage, Newfoundland was sighted, but not explored.

In the 1498 voyage Cape Cod was passed, and this area is shown as "sea discovered by the English" on Juan's map. The explorers probably reached the mouth of the Delaware River. One delightful point to note is that Cabot shows the coast running approximately east and west in the latitude of England instead of from north-east to south-west, the reason for this being that he was determined to remain within the limits of the patent as regards latitude. Juan de la Cosa, who accepted the "political" survey of Cabot, also deliberately falsified his own map to show San Salvador in the latitude of Palos, the starting-point of Columbus.

To sum up, Cabot had made great discoveries, but he had not started a profitable trade. Instead of ships laden with spices, as was hoped, he returned without having sold his cargo or brought home anything of the slightest commercial value. Consequently the adventure was temporarily abandoned. The Spaniards were hostile to it, and Henry VII wished to remain on good terms with Spain. Nothing can however obscure the importance of Cabot's exploration, which opened up lands of the greatest value, and discovered the cod fisheries. Nor can it be forgotten that Newfoundland was the first English colony.

Sebastian Cabot followed in his father's footsteps as an explorer. Peter Martyr, the famous letter-writer, gives an account of his Arctic voyage of 1508–9 in which "he found numerous masses of floating ice in the middle of the month of July. Daylight lasted nearly twenty-four hours." He also made an expedition to the La Plata Valley, which ended in failure. An English family, descended from a certain John Strickland, believes that the founder of their family accompanied Sebastian Cabot to South America and introduced the turkey, which was a domesticated bird in Mexico, into England. This belief is supported by the fact that "a turkey-

cock in its pride" appears in the coat of arms granted to him in 1550,[1] while the Sheldon tapestries of this period show the turkey as a subsidiary ornament.

Christopher Columbus remains for all time the central figure in the discovery of the New World. The fact that the geographical information on which he relied was inaccurate in no way lessens the credit that is his due, and he fully merits his epitaph:

"*A Castilla y a Leon*
Nuevo mundo dió Colon."

Much credit is also due to Amerigo Vespucci, to John Cabot and to Magellan. The wonderful achievements of these explorers, combined with the splendid work of Diaz and Da Gama, who discovered the ocean route to India, inaugurated the modern world, and dwarf all other events in history.

[1] It is interesting to note that the name of "turkey" was first applied in England to the guinea-fowl. The French word *dinde* is the more correct, as showing that the bird was, like the potato, maize and tobacco, a gift of the New World.

CHAPTER XIV

THE CONQUISTADORS

> "When the great Montezuma examined the helmet which Cortes had sent him and that which was on the god Huichilobos, he felt convinced that we belonged to the race which, as his forefathers had foretold, would come to rule over that land."
>
> "*The Discovery and Conquest of Mexico*", *by* BERNAL DIAZ DEL CASTILLO.

THE first phase of exploration in the New World was continued in the second by the search for a western route to the Spice Islands, which resulted in the exploration of the eastern and, later, of the western coast-line of America, and in the circumnavigation of the world by Magellan.

Among the most important discoveries of this wonderful period was that of Vasco Nuñez de Balboa, who, in 1513, crossed the Isthmus of Panama, and sighting a new ocean, rushed into its waters in full armour. Naming it the South Sea, he took possession of it and the countries bordering on it in the name of the King of Castile. This discovery, which gave a great stimulus to the quest of the Spice Islands, led to the foundation of Panama in 1519, and this town became the base for further explorations, while the adjoining town of Balboa commemorates the heroic *Conquistador*.

In 1517, an expedition which was based on Cuba discovered Yucatan.[1] "From the ships we could see a large town, and as we had never seen such a large town in the Island of Cuba . . . nor in Hispaniola, we named it the Great Cairo. . . . The Indians were clothed in cotton shirts made like jackets, and covered their persons with a narrow cloth, and they seemed to us a people superior to the Cubans." They were certainly warlike, and attacked the Spaniards whenever they landed, inflicting severe losses on them. Finally, the expedition returned to Cuba to report the discovery. A second exploring party, which also met with a hostile reception, brought news of the existence of Mexico and of its gold.

The Governor of Cuba determined to send a powerful

[1] For this section I have consulted Bernal Diaz del Castillo's *Discovery and Conquest of Mexico*, translated by A. P. Maudslay (Broadway Travellers).

squadron to explore this land of golden promise, and appointed Hernan Cortes, "who held a grant of Indians" in Cuba, to command it. In February 1519 the expedition, which consisted of eleven ships with 100 sailors and 500 soldiers, sailed from Cuba. Like their predecessors, the Spaniards met with a most hostile reception in Yucatan, but thanks mainly to the small force of horsemen—the Indians believed that they were attacked by Centaurs—they defeated their opponents, albeit not without suffering losses. Cortes founded Vera Cruz to serve as his base, and was welcomed by representatives of Montezuma, the Aztec monarch who, inspired by the prophecy which serves as the motto to this chapter, sent rich gifts to the Spaniards.[1] He had heard of the previous expeditions and had received a pictorial report of the bearded white men, which had caused him deep anxiety, and accounts for the tortuous but vacillating policy he pursued.

The Aztecs, who ruled from Mexico City situated in a lake some 200 miles from the coast, were a dominant tribe which, like the Dorians in Greece, had gained the hegemony over a more civilized race by warlike prowess and administrative capacity. Their religion was based on human sacrifice, the victims usually being prisoners of war whose hearts were offered to the idols. As in other parts of the world, the custom of sacrificing the human representative of the god to ensure fertility was observed.[2] This blood tax represented thousands of victims, and Aztec policy encouraged revolt, so as to secure prisoners, while they fought to capture prisoners for sacrifice rather than to kill, a custom which saved Cortes and the Spaniards from disaster.[3] Cortes was favoured not only by this fortunate prophecy and by the Aztec unwillingness to kill. He soon discovered the hatred with which the dominant race was regarded, and made allies, by whose assistance he finally conquered Mexico.

His march to the interior began from Cempoala, where an influential *cacique* declared for the Spaniards and served them loyally. The route ran between high mountains, rising to a pass of some 10,000 feet, followed by a descent to the upland plains of Tlaxcala, which were situated at about 7,000 feet. This march occupied a fortnight, and the reception of

[1] The masks presented on this occasion are among the treasures of the British Museum.

[2] Vide *The Golden Bough*, by Sir James Frazer, p. 587. On p. 488 there is an interesting account of the sacramental eating of bread as the body of the god in Mexico.

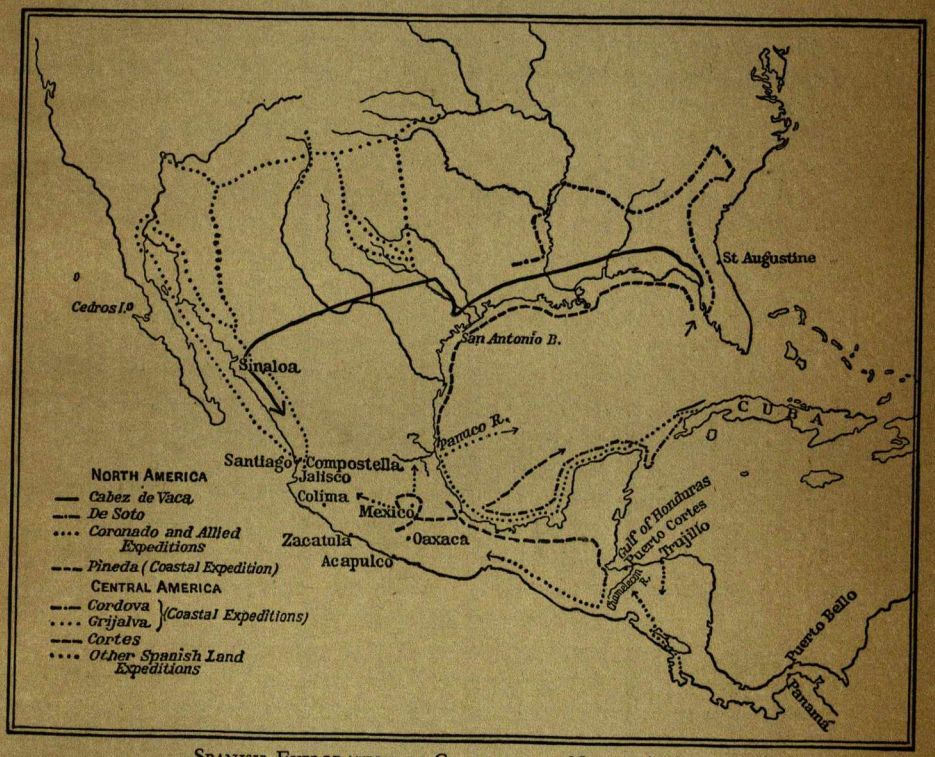
[3] In Persia a reward was given for each head that was brought in, a custom which lowered the military value of a Persian army by preventing an effective pursuit.

HERNAN CORTÉS
(*From an oil painting in the Municipal Palace, Mexico*)

[*face p.* 128

the Spaniards by the Tlaxcalans was at first very hostile. They threatened "to kill those whom you call Teules (gods), and to eat their flesh, and we will see whether they are as valiant as you announce". The Tlaxcalans displayed extraordinary valour, but on being defeated they wisely decided to make peace and became the devoted adherents of the Spaniards.

Cortes was welcomed at their chief town, Tlaxcala, where he received ambassadors from Montezuma, who sent him more



SPANISH EXPLORATION IN CENTRAL AND NORTH AMERICA.

rich gifts and promised to pay tribute on condition that the Spaniards stayed their advance. Encouraged by these unmistakable signs of weakness, Cortes marched on, and from Tlaxcala he made for Cholula, where, through the treachery of Montezuma, the Spaniards were attacked. However, warned by his allies, Cortes surprised his assailants and inflicted severe losses on the townspeople, who readily submitted, while the Mexican troops who lay in ambush outside the town, upon hearing of the failure of the plot, hastily retired.

From Cholula, Cortes despatched a party of volunteers to climb the volcano near Huexotzingo, which was in eruption at the period. None of them had ever seen a volcano, but, undeterred by stones and ashes and "great tongues of flame", the explorers climbed to the lip of the crater and enjoyed a wonderful view of "the great city of Mexico, and the whole of the lake, and all the towns which were built in it". They also acquired much prestige from the feat.

Cortes steadily advanced, and, to quote Diaz: "When we saw so many cities and villages built in the water and other great towns on dry land, we were amazed, and said that it was like the enchantments they tell us of in the legend of Amadis. And some of our soldiers even asked whether the things were not a dream." But the historian soon realized the facts: "Gazing on such wonderful sights, in front of us stood the great city of Mexico, and we—we did not even number 400 soldiers!" The capture of Montezuma, his death, the temporary withdrawal of the Spaniards from Mexico City, known as the *Noche Triste*, and their final success, fall outside the scope of this work, but may be read in the glowing pages of Diaz.

Mexico City fell in August 1521, and Cortes despatched troops in every direction to explore the country and to found towns at important centres. Northwards the victors reached the Pacific coast, founding the port of Zacatula, and penetrated into California and Texas. Southwards Alvarado explored Guatemala, while another expedition explored Honduras. Indeed, within three years the Conquistadors marched armed forces from Panama to beyond the northern boundary of Mexico, a distance of perhaps two thousand miles.

Among the greatest explorers of what was later to become the United States of America was Cabeza de Vaca.[1] He joined an expedition under Pamfilo de Narvaez, who had been granted the right to conquer and colonize the country between Mexico and Florida. De Narvaez landed in Tampa Bay on the west coast of Florida in April 1528 and, instead of exploring the coast, decided to leave his ships and to march northwards. From the first the question of supplies was acute, while the natives were generally hostile. The party reached the "town" of Apalache, which consisted of forty huts in the vicinity of Apalache Bay. There De Narvaez, who had entirely lost touch with his squadron, decided to construct some boats, and in

[1] For this section I have consulted *Spanish Explorers in the Southern United States*, by F. W. Hodge and T. H. Lewis, 1925.

these, without a single navigator to guide them, they embarked. During this unfortunate voyage "we took fresh water from the sea, the stream entering it in freshet", this reference being the first mention of the waters of the mighty Mississippi.

As might have been anticipated, the expedition ended in disaster, from drowning, starvation, wounds and slavery. Finally De Vaca and three survivors, after years of privations, and entirely naked, made their way westwards to the Colorado River. The intrepid explorer won veneration as a healer, and thus obtained food and was enabled to pass safely through the country. Throughout, he gave a remarkable description of the various tribes, and wrote: "I believe these people see and hear better, and have keener senses, than any others in the world. They are great in hunger, thirst and cold, as if they were made for the endurance of these more than any other men, by habit and nature." He also described in some detail the vegetable products and the animals, including the bison. Finally, in 1536, after having traversed the continent for the first time, he reached Mexico.

Another most important expedition was that of Francisco Vazquez de Coronado, who in 1540, relying on the accounts of De Vaca and of an imaginative friar, marched north from Mexico parallel to the coast, but keeping a certain distance inland. His first objective was the seven cities of Cibola, represented by the friar as containing houses of many storeys and infinite wealth. Upon arrival, to the fury of the Spaniards, "it was a little crowded village looking as if it had been crumpled up all together and containing about 200 warriors". A party, headed by Coronado, reached Quivira, believed to be the area where the Arkansas and Kansas Rivers approach one another in the centre of America, Kansas City being considered to be situated in the heart of the continent.

During this journey they "came to some settlements of people who lived like Arabs and who are called Querechos (Eastern Apaches). They lived on the bison, killing them as required for food and for their skins, and following them in their migrations." Another party reached the Grand Canyon, where "they spent three days looking for a passage down to the river, which looked from above as if the water was six feet across, although the Indians said it was half a league wide". I visited the Grand Canyon some years ago, scrambling down a mule track for perhaps 3,000 feet, and spent two days on the banks of the Colorado River, which was about 100 yards wide so far as I can remember. This

great chasm particularly interested me, since I had seen similar formations in Persia, albeit on a much smaller scale. Indeed, Arizona resembles the Persian plateau in its altitude of 5,000 feet, its lack of rainfall, its steppe vegetation, its serrated ranges and the domed adobe huts of the Indians. To complete the comparison, the scanty population of Spanish descent uses Spanish saddles and bridles, which came to Spain through its Moslem conquerors from Persia. The Grand Canyon at dawn exhibits nature in her most austere mood, and impressed me deeply.

> " What makes the lingering Night so cling to thee ?
> Thou vast, profound, primeval hiding-place
> Of ancient secrets,—grey and ghostly gulf
> Cleft in the green of this high forest-land,
> And crowded in the dark with giant forms !
> Art thou a grave, a prison, or a shrine ? " [1]

Like Cabot, Coronado was considered to have failed, since he found no gold or other valuable products. But, as the successor of De Vaca, and of De Soto, who discovered the Mississippi, he explored the vast plains of the interior of North America and, like the illustrious navigator, he certainly deserves a niche in the temple of Fame.

We next come to the exploration of the west coast of America and the conquest of Peru by the celebrated *Conquistador* Francisco Pizarro. He sailed from Panama in 1524, " and for three years they suffered great hardships from hunger and cold. The greater part of the crews died of hunger. . . . All was swamp and inundated country, without inhabitants." [2] With indomitable courage Pizarro at length crossed the equator and reached a country whose inhabitants lived in villages and towns. Their products included bananas, maize, sweet potatoes, pineapples and cocoanuts, while golden ornaments were worn. The llama was seen for the first time by the explorers, who had reached the province of Quito, which formed the northern division of the empire of Peru.

At this period the Incas of Peru were the predominant power in South America. They were mountaineers who had entered the country from the south and, settling at Cuzco, had gradually conquered the country as far as Quito in the north. The inhabitants of the coastal regions, who possessed

[1] From a poem by Henry Van Dyke.

[2] *Reports on the Discovery of Peru*, by Clements Markham, Hakluyt Society, 1872. This work includes reports by Francisco de Xeres from which the quotations are taken.

a higher civilization, had resisted, but, as their cultivation depended on irrigation water drawn from the mountains, and the Incas had seized the sources, they unwillingly submitted. The Incas possessed no script, their only form of record consisting in knotted cords, called *Quippu*, which served for accounts.

The monarch was looked upon as the son of the tribal god, the Sun, and the entire administration was centred in his person. When Pizarro appeared on the scene the ruling god had just died, and a pretender, Atahualpa by name, had seized the throne after desperate fighting in the spring of 1532. This was an amazing piece of good fortune for Pizarro, who landed in Peru at an especially opportune time.

After this reconnaissance, during which he had sailed nine degrees of latitude farther south than any of his predecessors, Pizarro returned to Spain, where " he was granted the government and command of that land ".

In 1531 he set out on his famous expedition with " 180 men, with thirty-seven horses, in three ships ", and landed at Tumbez in May 1532. In the first instance, he decided to reconnoitre the country, and founding a town to serve as his base, named it San Miguel. Meanwhile, he heard of the civil war and of its result. He also ascertained that Atahualpa was encamped at Cajamarca, distant some twelve stages on the far side of the Andes.

Resolved to dare all things, in the autumn Pizarro, at the head of 160 men, of whom sixty were cavalry, marched inland towards the camp of the Inca monarch. At many stages he found royal buildings furnished with supplies, while the population was friendly. On the way he received gifts from Atahualpa, who welcomed him to his country and invited him to his camp.

Leaving the fertile area, Pizarro crossed the sandy desert of Sechura in three stages to Motupe. Here he rested the tiny force for three days, and Xeres noted that " each month they sacrifice their own children ". The crossing of the Andes, which was " so steep that, in places, they had to ascend by steps " was a severe test alike to man and horse. The cold was bitter after the warmth of the plains, and position after position could have been held against them by a mere handful of men. However, there were no signs of hostility, and the little force finally reached the fertile valley of Cajamarca, where Atahualpa was encamped with an army 50,000 strong. Pizarro, basing his policy on that of Cortes, decided

to seize Atahualpa, which he did by treachery. The execution of the unfortunate Inca followed, Peru fell like a ripe pear, and Pizarro occupied the capital, Cuzco, with its fine buildings and swarming population. Generally speaking, there was much less resistance than at Mexico, albeit the prize was richer, and before long Peru was occupied from Cuzco to Quito. Lima was founded in 1535, and became the capital.

The first expedition into Chile was led by Diego de Almagro. In 1535, with 600 Spaniards and 15,000 Indians, most of whom he lost in the snows of winter, he occupied the northern part of the country, but, in the absence of gold, no permanent conquest was attempted. Later Valdivia,[1] with a very small force, invaded Chile, and founded Santiago in 1541. Realizing that the country was suitable for farmers, he gradually occupied the fertile lands and penetrated to the site of the present town of Valdivia, which was founded in 1552. In no part of America was the resistance offered so determined as was that of the Araucanians, but under Mendoza the Spaniards penetrated farther south, and, in 1577, discovered the archipelago of Chiloe. It is interesting to note that not until the nineteenth century were the warlike Indians of Southern Chile finally subdued.

In the space at my disposal I cannot describe the many expeditions that were made up the Magdalena River and elsewhere in that area to find a rumoured El Dorado. Nor can I do more than mention the expedition of Pizarro's brother Gonzalo across the Cordillera [2] to the rain forest, which ended in failure.

These conquests, which were permanent, were among the most amazing ever made. Alexander and Caesar conquered with powerful armies, whereas the Spaniards were merely a handful of cavalry and infantry, though supported, it is true, by artillery and firearms, which represented a superior armament, while their horses inspired terror both in Mexico and in Peru.

Well might Xeres write:

"For when, either in ancient or modern times, have such great exploits been achieved by so few against so many, over so many climes, across so many seas, to subdue the unseen and unknown? Whose deeds can be compared with those of Spain?"

[1] Vide *Pedro de Valdivia, Conqueror of Chile*, by R. B. Cunninghame Graham, 1926.

[2] The reader is referred to *Geographical Discovery and Exploration*, by J. N. L. Baker, 1932, where an excellent description of these explorations may be found.

CHAPTER XV

MAGELLAN AND THE CIRCUMNAVIGATION OF THE WORLD

> "He was more constant than ever anyone else in the greatest of adversity. He endured hunger better than all the others, and more accurately than any man in the world did he understand sea charts and navigation."
>
> PIGAFETTA'S *Eulogy of Magellan.*

THE great age of exploration with which we are dealing enshrines three outstanding names: Christopher Columbus, Vasco da Gama and Magellan. The last of the illustrious trio completed the epoch by the circumnavigation of the globe, discovering the straits that are called by his name, crossing the Pacific Ocean, which he so named from the absence of storms, and reaching the Spice Islands of Asia, which were still the main objective of all explorers.

Ferdinand Magellan was born about 1480 at Sabrosa, situated in the extreme north of Portugal. He belonged to a noble family, and after serving at Court as a page, he enlisted in 1505 as a volunteer in the great armada of Francisco d'Almeida, and was wounded in the two fierce naval engagements described in Chapter XII. He also served in Sequeira's reconnaissance of Malacca in 1509, in Albuquerque's capture of the city in 1511, and in the cruise to Java and Amboina.[1] He had certainly distinguished himself during the seven years of his service in the East, and upon his return to Portugal, this was recognized by an increase in his official stipend and by his promotion to the rank of *Fidalgo escudeiro.*

In 1513 Magellan took part in a campaign in Morocco, in which he was again wounded. Upon his return to Lisbon, he was charged with irregularities in connection with the distribution of the booty, and was coldly received by Dom Manuel, who evinced his displeasure. Realizing that there was no future for him in Portugal, and deeply hurt by the injustice of the King, Magellan publicly repudiated his nation-

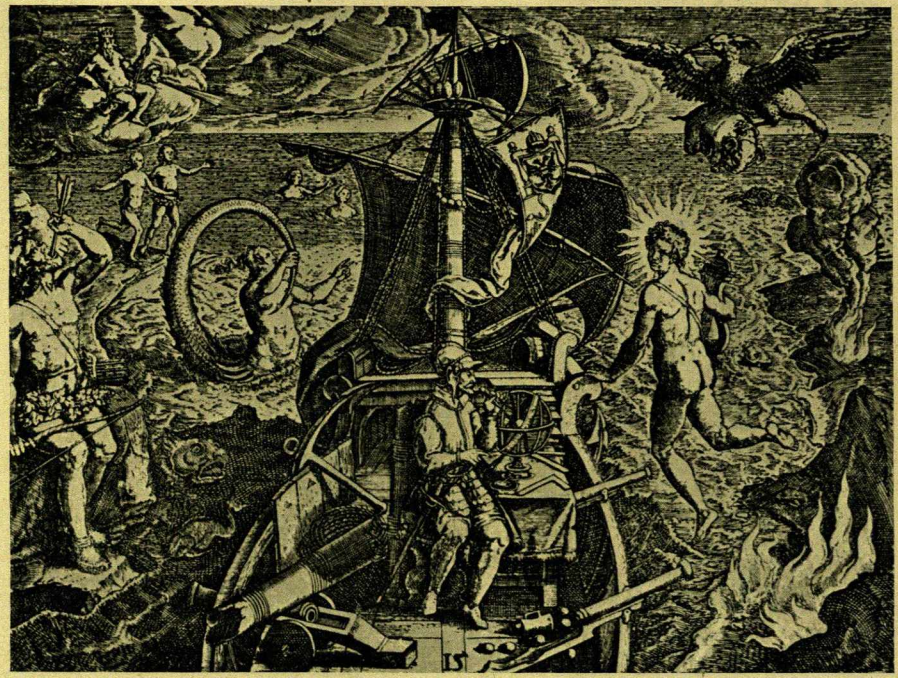
[1] In this section I have consulted *The Life of Ferdinand Magellan,* by F. H. H. Guillemard, 1870, and *Magellan's Voyage around the World,* by Antonio Pigafetta, translated by J. J. A. Robertson, 1906.

ality and entered the service of Charles V. With his excellent record of wide exploration, which had included the Spice Islands, a native of which he was able to exhibit, as well as a slave-girl from Sumatra, Magellan was taken seriously at the Spanish Court. His plan was to sail southwards along the coast of South America, beyond the point explored by Amerigo Vespucci, and he asserted his firm belief in the existence of a passage from the Atlantic to the South Sea, which would open a westerly route to the Spice Islands.

Charles V, after due consideration, gave orders for the expedition, and, in spite of strong remonstrances from Portugal, a squadron of five ships was prepared and on September 20, 1519, set sail from San Lucar. It is uncertain whether Magellan possessed any definite information as to the existence of a cape or strait which would enable him to round South America. To a certain extent he must have been influenced by the classical belief in symmetry, which, as mentioned in Chapter I, made Herodotus trace the course of the Nile to correspond with that of the Danube. Apart from this, he certainly possessed some vague information as to the existence of a strait, and Pigafetta writes: "Had we not discovered that Strait, the Captain-General had determined to go as far as seventy-five degrees toward the Antarctic Pole." In any case he was a lion-hearted explorer, determined to sail by way of South America to the Spice Islands.

From San Lucar Magellan shaped a south-westerly course, touching at Teneriffe and passing between Cape Verde and its islands. He struck bad weather on the equator, but continuing the voyage the coast of South America was sighted at Santo Augustino and was followed to Port St. Julian, situated in latitude 49° 20′ S., which was reached on March 31, 1520. In this sheltered harbour, which had been discovered by Vespucci, it was decided to winter, and the long period of inaction in a cold climate on reduced rations, combined with fears for their own safety, led to a plot, headed by some of the chief officers, which aimed at the assassination of Magellan and his supporters and the abandonment of the enterprise. Truth is stranger than fiction, and the amazing courage and subtle resourcefulness displayed by the leader in dealing with an apparently hopeless situation, crushed the mutiny.

Towards the end of April a reconnaissance led to the discovery of a river abounding in fish, which was named the Santa Cruz. The reconnoitring ship was wrecked in a heavy storm, but the crew escaped. The winter had set in, and



MAGELLAN PASSING THROUGH THE STRAITS
(*From de Bry*)

[*face p.* 136

although the country appeared to be uninhabited, one morning a giant appeared on the beach, dressed in skins, with boots of the same material, which originated the name of Patagon or "large clumsy foot". According to Pigafetta "he was so tall that we reached only to his waist, and was well proportioned". In August the expedition sailed south to the Santa Cruz River, where two months were spent in cutting wood and drying fish, as the stores were running out.

In mid-October the voyage was resumed, and on October 21, 1520, a notable date in the history of exploration, the Straits destined to be named after Magellan were discovered in latitude 52° S., or only some two degrees beyond the limit reached by Vespucci. "Then", to quote Pigafetta, "all together thanking God and the Virgin Mary, we went to seek the strait further on." At a point where "we found two openings" a reconnaissance was made, and "the men returned within three days, and reported that they had seen the cape and the open sea. The Captain-General wept for joy."

The Straits are only some 300 miles in length, but took over a month to negotiate. When this had been safely accomplished, Magellan found himself in the vast ocean, which he termed the Pacific, with only three ships, the *San Antonio* having deserted.

Supplies had run short, but Magellan after his splendid discovery scorned all thoughts of turning back, and the voyage was resumed. Sailing north within sight of land for some days, he shaped a north-westerly course, and thereby missed islands at which supplies and water could have been obtained had he kept more to the south. The sufferings of the explorers were terrible. Pigafetta writes: "We ate powder of biscuits swarming with worms. We drank yellow water that had been putrid for many days. Rats were sold for one-half ducado apiece." For ninety-eight days they sailed over this vast ocean, and, at last, sighted the Ladrone Islands, where the natives stole Magellan's skiff and thus earned their unenviable designation.

Refreshed by fruit and vegetables the sailors resumed their voyage, and, seven days later, the Philippine or St. Lazarus Islands, as Magellan named them, were reached. Here their reception was most friendly. At the small island of Limassana, Magellan's slave, Enrique of Malacca, was able to act as interpreter, and thus paved the way for real intercourse. Rejoicing in the fertility of this wonderful un-

explored archipelago, Magellan entered the port of Sebu, where a formal treaty was concluded with the King.

Magellan had circumnavigated South America and had reached the Philippine Islands, as they were renamed a generation later. He had won through to the neighbourhood of the Spice Islands, and it now remained to return to Spain and receive the reward that he so richly deserved. But the gods thought otherwise, and he was killed in a skirmish with natives on the neighbouring island of Mactan on April 27, 1521.

Under Sebastian del Cano the survivors of the expedition, which had been further weakened by an act of treachery at Sebu, shaped a course to Brunei, the chief port of Borneo, which "is entirely built in salt water and contains 25,000 fires". The Sultan received them hospitably, but, after a while, there was reason to suspect treachery, so they set sail north-east to find an islet where they were able to beach the ships, which were caulked and generally repaired. Continuing the voyage, the Moluccas were reached, and the two remaining ships anchored close to the shore of Tidor, ruled by a Moslem, who welcomed the Spaniards, and supplied them with cloves.

Reduced to one serviceable ship, the *Victoria*, the Spaniards sailed from Tidor in December 1522. They touched at Timor and shaped a course across the Indian Ocean for the Cape of Good Hope. They feared to visit Mozambique, and touching at the Cape Verde Islands, where some of their sailors were made prisoners by the Portuguese, three years almost to a day after their departure from Spain, the survivors finally reached Seville. They had sailed round the world.

Magellan will remain for all time a heroic explorer who was worthy of his great achievement. He was not only the greatest navigator of his age, and a man of indomitable courage and resource, but his unselfishness and wide outlook were equally remarkable. The geographical results of this wonderful voyage corrected the error of Ptolemy as to the size of Asia which appears on Behaim's famous globe of 1492, and revealed the Pacific Ocean in its true magnitude. Belief in this great geographer's second error of a great southern continent was rather strengthened by Magellan's report that Tierra del Fuego was part of such a continent, whereas it actually consists of several islands.[1]

[1] Vide "The World Map before and after Magellan's Voyage," by E. Heawood, *Journal R.G.S.*, Vol. LVII, p. 431, 1921.

The Philippine Islands were conquered in 1564 by a Spanish squadron which sailed from Navidad, a Mexican port. This inaugurated an annual despatch of ships during the season of the north-east winds. The pioneer of the passage of the Pacific from east to west was Andres de Urdaneta,[1] who accomplished this difficult feat by sailing as far north as latitude 42°. The return voyage from the Philippines to New Spain now became a matter of routine, but was always considered to be dangerous. During this period New Guinea and other islands were discovered, but there was little attempt to undertake new exploration, the energies of Spain and Portugal being devoted to colonization and commerce in their rich possessions.

In 1578 the monopoly of the Pacific Ocean was rudely broken by the appearance on the scene of Francis Drake. That great English navigator set out on his memorable voyage from Plymouth in November 1577 with a squadron of five ships and a personnel of 164 officers and men.[2] Following the west coast of Africa, where he made prizes of Spanish and Portuguese vessels, from the Cape Verde Islands he sailed across the Atlantic to Brazil, which was sighted in latitude 33° S. He anchored in the River Plate, the appointed rendezvous, and continuing southwards reached sinister Port St. Julian, where, like Magellan, he dealt successfully with an attempt at mutiny. The passage of the Straits of Magellan was difficult, but on September 6, 1578, Drake reached the Pacific Ocean, on which he was the first Englishman to sail a ship. Unlike Magellan he was met by very bad weather, and, to quote from Hakluyt's work, "wee were driven by a great storme from the entring into the South Sea to the Southward of the Streight in 57 degrees and a terce: in which height we came to an anker among the Islands". This was in effect an important discovery, as the storm had taken the English explorers beyond Cape Horn, to the south of which they had found safety among the islands. Drake's claim to have been to "the southernmost knowne land in the world" is fully justified, and his discovery actually proved that Tierra del Fuego did not form part of the mythical southern continent of Ptolemy, but consisted of islands.

Drake sailed northwards, searching in vain for his lost ships—Winter had deserted and sailed home—"full sore

[1] Vide *The Philippine Islands, etc.*, by Antonio de Morga, Hakluyt Society, 1st series, Vol. XXXIX, pp. 355–6.

[2] For this section *vide* Hakluyt's *Principal Navigations*, Vol. XI, p. 191 *et seq.*

against the mariners minds". He found that the coast ran north-east and eastwards, and not north-west, "as the generall Maps have it". At Valparaiso he came into contact with the Spaniards, and made a valuable prize of a ship from which he replenished his stores. His successful cruise along the coast of South and North America lies outside the scope of this work, but he "sayled on the backside of America to 43 degrees Northerly latitude", where the "faire and good Baye" which he discovered has been identified with the Bay of San Francisco. It is one of the most beautiful harbours I have visited. Drake "calling this countrey Nova Albion . . . set up a monument of our being there, as also of her Majesties right and title to the same". So far as Drake could ascertain, the Spaniards had not penetrated so far north.

The voyage across the Pacific, thanks to the ample supply of stores taken from the Spaniards, and the favouring winds, was successfully accomplished, and the English adventurers anchored at Ternate in the Moluccas, where they were received in the most friendly manner, and where Drake made a treaty which was looked upon as of considerable value by the ministers of the Queen. Continuing the voyage "we ranne suddenly upon a rocke, where we stuck fast from 8 of the clocke at night, til 4 of the clocke in the afternoon of the next day". Fortunately the wind changed, and "the happy gale drove our ship off the rocke into the sea againe". At Java Drake was equally well received, and having shipped a rich cargo of spices, he shaped his course for the Cape of Good Hope, which he "passed by the 18 of June" and, on November 3, 1580, he reached Plymouth. His voyage, like that of his great predecessor, had taken three years, but, more fortunate than Magellan, Drake lived to accomplish his task and to receive the rewards bestowed upon him by his grateful sovereign.

CHAPTER XVI

EXPLORERS IN NORTHERN LATITUDES DURING THE SIXTEENTH AND SEVENTEENTH CENTURIES

> "Learned men and painefull travellers have affirmed with one consent and voice, that America was an Island: and that there lyeth a great Sea between it, Cathaia and Grondland, by the which any man of our countrey, that will give the attempt, may with small danger passe to Cathaia, the Moluccae and India."
>
> *Discourse of Sir Humphrey Gilbert.*

It is not generally realized that the early exploration of the Arctic regions, which was mainly undertaken by English navigators, was due to the desire to reach Cathay and the Spice Islands. It was hoped to sell broad-cloth, the chief manufacture at that period, to the Chinese and to purchase spices with the proceeds.[1] The eastern and western routes by the Cape of Good Hope and the Straits of Magellan were monopolized by the Portuguese and Spaniards respectively, albeit this monopoly was being challenged, as we have already seen. But, should a northern route to the Moluccas be discovered, it would avoid the risk of death, capture or imprisonment, if not of becoming the victim of an *auto da fé*, and, so far as Cathay was concerned, it would be a much shorter route.

In the first instance a search was made for a North-East passage to Cathay by the merchant adventurers of the Muscovy Company, on whose behalf Sebastian Cabot drew up the instructions for the first voyage, which enjoined that "You use all wayes and meanes possible to learne how men may passe from Russia either by land or by sea to Cathaia". Its leaders were Sir Hugh Willoughby and Richard Chancelor, who sailed in command of three ships from Deptford in 1553. Before striking the coast of Norway, Willoughby disappeared in a great storm, and both he and his crew died of cold in the bay of Arzina, on the coast of Lapland. The third ship was also lost, but Chancelor had better fortune, for "he held on his course towards that unknown part of the world, and

[1] I have to thank Mr. J. M. Wordie for valuable suggestions in this chapter.

sailed so farre, that he came at last to the place where he found no night at all, and it pleased God to bring them into a certaine great Bay ".[1] This was the White Sea, and the voyage led to the discovery of Russia by the English. On landing, Chancelor was well received, and proceeded to Moscow, " a troublesome journey, wherein he had the use of certaine sleds ". The Grand Duke Ivan entertained the Englishman most hospitably, and thus was inaugurated a valuable trade with Russia, regarding which country Chancelor collected much valuable information, the earliest to be received in England. It was speedily utilized, and in 1555 Chancelor returned to Russia, and secured from Ivan a monopoly of trade in the White Sea for the Muscovy Company.

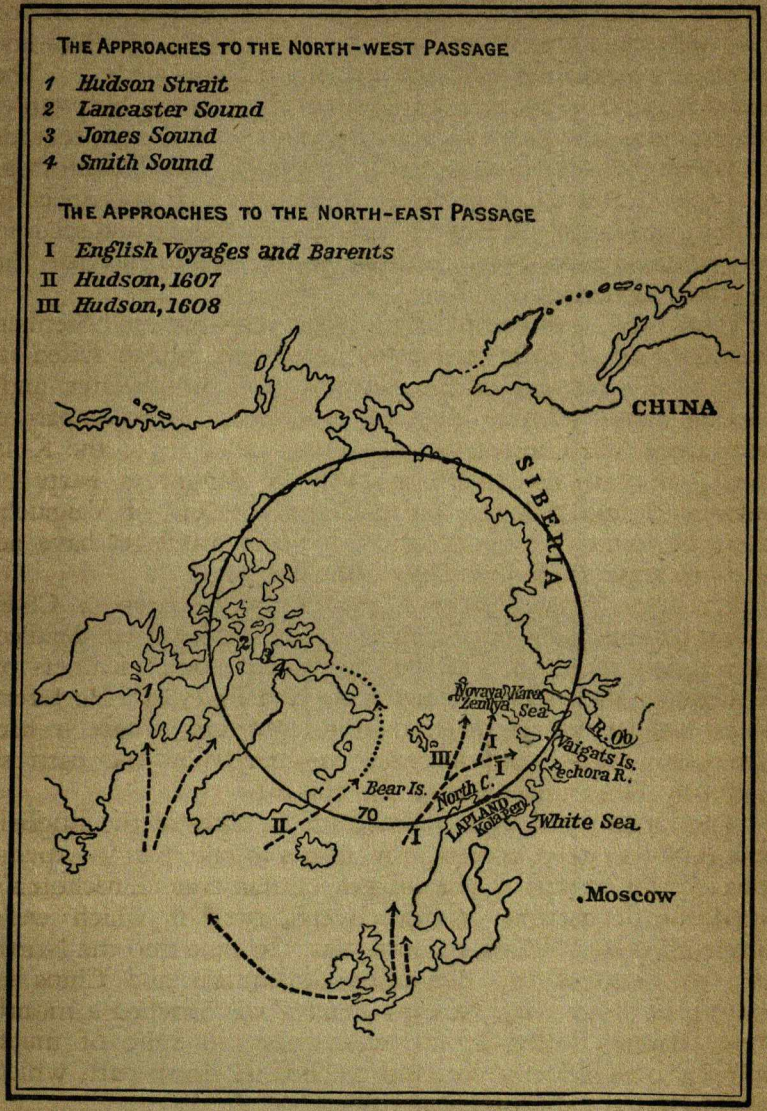
From the standpoint of Arctic exploration, Stephen Burrough led a more successful expedition, which sailed in April 1556. He was off the North Cape a month later, and, meeting some friendly Russian fishermen, he accompanied them across the Cronian Sea, as Pliny called it, to the Kola River. In July he " went in over the dangerous barre of Pechora ",[2] and sailed as far east as the island of Vaigaich, where he found Samoyeds who " for their carriages have no beasts to serve them, but Deer only ".

We learn from Purchas [3] that Antony Marsh, a Chief Factor of the Muscovy Company, not only gained detailed information about the Ob, but despatched some members of his Russian staff, who reached it by land in 1584. He refers to an English vessel which had reached Ob, where it had been shipwrecked and its crew murdered by the natives. This was the eastern limit of the English.

The Dutch, who had watched the voyages of the English explorers with deep interest, now began to take part in expeditions to the Arctic. The object of Jan van Linschoten's expedition, consisting of four ships, two of which were commanded by William Barents, was " to saile into the North seas, to discover the kingdoms of Cathaia and China ".[4] Starting in June 1594, Novaya Zemlya was reached a month later. Barents sailed up its west coast, in spite of much difficulty owing to the ice, and reached its north part, which is called after its discoverer.

A second voyage in 1595 was not so successful, but in

[1] Hakluyt's *Voyages*, Vol. II, p. 248 *et passim*.
[2] The Petsora of Milton's passage quoted below.
[3] *Pilgrimes*, Vol. III, pp. 804–6.
[4] Vide *The Three Voyages of William Barents*, by Lieut. Koolemans Beynen (Hakluyt Society), 1876.



THE APPROACHES TO THE NORTH-EAST AND THE NORTH-WEST PASSAGES.

the following year a third expedition was made under Heenskerck with Barents as pilot and was notable for the discovery of North-West Spitsbergen. Later the explorers attempted to sail round Novaya Zemlya, but were unable to do so. The unfortunate crew were forced to winter in great misery —the first time an Arctic winter had been faced. The heroic Barents, who died during the homeward voyage, certainly ranks among the great Arctic explorers.

In 1601, Henry Hudson[1] sailed from England in an attempt to reach Japan by the North Pole. In this expedition he explored the east coast of Greenland, but bore away to Spitsbergen when a very high latitude was reached. He found his way barred by ice, and returned to England. It is interesting to note that in the map of Ortelius published in 1570, and indeed in other maps of the period, a clear passage is shown running due east across the northern coast of Asia. Actually the strenuous efforts made by the brave and experienced navigators barely succeeded in traversing one quarter of the enormous distance which separated North Cape from Bering Strait. To quote Milton:

> "As when two polar winds, blowing adverse
> Upon the Cronian sea, together drive
> Mountains of ice, that stop the imagin'd way,
> Beyond Petsora eastward, to the rich Cathaian coast."

The search for a north-east passage had failed, but attempts continued to the north-west. Sir Humphrey Gilbert wrote a learned work "to prove a Passage by the North-west to Cathaia and the East Indies". His thesis was that America was undoubtedly the lost Atlantis of the classical geographers, and while relying on "Plato, Aristotle and other philosophers", he argued that symmetry demanded a strait in the north of America to balance the Straits of Magellan in the south. Martin Frobisher, who was undoubtedly encouraged by such views as these, led an expedition to find a north-west passage in 1576. Rounding the south of Greenland (which he thought was the fictitious Frisland), he found what he hoped was the sought-for strait; but it was merely a bay, which is called after the explorer. He described the Eskimos as "like Tartars, with long blacke haire, broad faces, and flatte noses, and tawnie in colour, wearing Seale skinnes. . . . The women are marked in the face with blewe streekes down the cheekes,

[1] Vide *Henry Hudson the Navigator*, by G. M. Asher (Hakluyt Society), Vol. XXVI, 1860.

and round about the eyes."[1] His experience of these "salvages" was not happy, as they carried off five of his men who were never seen again. He, in return, kidnapped a male Eskimo to show in England.

After Frobisher came John Davis, who, in 1585, sailed along the western shores of Greenland, naming it the Land of Desolation, and crossing Davis Strait discovered the vast Cumberland Sound which he believed would prove to be the elusive Strait. In a third voyage, undertaken in 1587, Davis reached latitude 72° 41′ N. on the west coast of Greenland.

We now return to Hudson, who started on his third and last voyage in 1610. From Greenland he entered the Strait which had been accidentally discovered by Frobisher on a third voyage which he had made in search of gold. Following it up in the hope that it would lead to the passage, the ill-fated Hudson reached the vast bay which, like the Strait, was destined to be called after him. The last entry of Hudson runs: "The third day we put through the narrow passage. . . . After wee had sailed ten leagues, the land fell away to the southward, and the other iles, and land left us to the westward. Then I observed and found the ship at noone in 61 degrees, 20 minutes, and a sea to the westward." Hudson explored the east side of the vast bay, the ship "being haled aground" on November 1, and, ten days later, it was frozen in. The following summer the crew mutinied, and Hudson with his son, Philip Staffe the carpenter, and the sick men were forced into the shallop and were never heard of again. It is satisfactory to read in the report of the not altogether blameless Abacuk Prickett, that the leaders of the mutiny all came to a miserable end.[2]

We next come to William Baffin, who was one of the greatest of the splendid line of English navigators and explorers. The discovery of Hudson Bay had naturally excited high hopes, but further examination by Baffin proved that the quest must be continued farther north.

Under Bylot as Captain he explored Hudson Strait in 1615. In the following year they sailed again much farther north than any of their predecessors up the coast of Greenland, naming the various peninsulas, and discovering Smith Sound and then Jones Sound and Lancaster Sound to the west, all three leading out of Baffin Bay as it is fittingly called. Baffin came to the conclusion that he had failed in his quest,

[1] *Vide* Hakluyt's *Voyages*, Vol. VII, p. 209. [2] *Op. cit.*, p. 98 *et seq.*

whereas he had in reality marked out the route which, followed by his successors, led to final achievement, though not until two centuries later.

William Baffin ended his splendid career in the Persian Gulf. He had surveyed its coast, for which he received a gratuity from the East India Company, and in 1622 he took part in the attack by the English on the fort of Kishm, held by the Portuguese. To quote *Purchas his Pilgrimes*, "Master Baffin went on shoare with his Geometricall Instruments, for the taking the height and distance of the castle wall; but as he was about the same, he received a small shot from the Castle into his belly, wherewith he gave three leapes, by report, and died immediately."[1] I have visited Kishm fort, where I was shown the Portuguese guns and cannon-balls.

The search for the North-West Passage was unsuccessful at this period, but as in the case of the earlier quest it yielded invaluable results to the successors of these great navigators, while the training in navigation in the Arctic was of inestimable value to the seamen.

Hitherto in this chapter we have dealt with sea voyages. We must now turn to the discovery of Canada by Jacques Cartier,[2] who, like other explorers, was searching for a new route to the Spice Islands. The cod fisheries discovered by Cabot were regularly visited by French, Spanish, Portuguese and English vessels. The French fishing fleet sailed from Saint-Malo, where its departure and return are still the chief subjects of interest in that picturesque port.

No attempt at serious exploration had been attempted since the voyages of Cabot until Cartier appeared on the scene off Cape Bonavista, Newfoundland, which is situated in the same latitude as Saint-Malo, in 1534. Coasting Newfoundland he sailed through the Belle Isle Strait, and examined the coast of Labrador, the sterile appearance of which caused him to write that "I am rather inclined to believe that this is the land God gave to Cain".[3] The inhabitants he described as "wild and savage folk clothed with furs and painted with tan colours".

Sailing along the west coast of Newfoundland, he crossed Cabot Strait to the fertile Magdalen Islands, "the best land we have seen; for two acres of it are worth more than the whole of Newfoundland". He admired Prince Edward

[1] *Some Years' Travels*, etc., p. 106.
[2] *The Voyages of Jacques Cartier*, by H. P. Biggar, 1924.
[3] Cp. Genesis iv. 12: "When thou tillest the ground, it shall not henceforth yield unto thee her strength."

Island, but could not land owing to the absence of a good harbour, and after reaching the mainland of Canada he crossed the mouth of the St. Lawrence to Anticosti Island. He attempted to explore the great river, but the "tides ran so strong that the vessels only lost way", and so it was decided to return to Saint-Malo.

In the following year Cartier started exploration at the point where he had left off, and after examining the northern shore for the hoped-for strait, he ascended the Hochelaga, as he called what is now the St. Lawrence. Friendly relations with the Indians were established through the agency of two natives, who had been taken to France and well treated, and, in spite of the strong current, good progress was made as far as Stadacona, the Indian village in the Charles River, of which he writes: "The region is as fine land as it is possible to see, being very fertile and covered with magnificent trees."

Continuing up the river with a bark and two long-boats, the grapes and the wonderful bird life delighted Cartier, who reached Hochelaga in the long-boats, to be received with dances and other signs of joy, the women bringing their babies to be touched by the strangers. He found Hochelaga to be a village of fifty large houses circular in shape and defended by a wooden palisade. Climbing an adjacent mountain, which he named Mount Royal, the French explorers enjoyed a marvellous view, ranging over plains with mountain ranges to the north and south, while following up the course of the great river they sighted "the most violent rapid it is possible to see". Thus was discovered the celebrated Lachine rapid.

Cartier had been remarkably successful. Not only had he discovered the fertile lower valley of the St. Lawrence and gained much valuable information as to the reaches above Hochelaga, which country was shortly destined to be colonized by France, but his discovery of the Strait of Cabot and of other islands bordering on the Gulf of St. Lawrence justify the high honour in which his name is held as an explorer.

CHAPTER XVII

EXPLORATION IN SOUTHERN ASIA DURING THE SIXTEENTH AND SEVENTEENTH CENTURIES

"As when the Tartar from his Russian foe,
By Astracan, over the snowy plains,
Retires, or Bactrian Sophi, from the horns
Of Turkish crescent, leaves all waste beyond
The realm of Aladule, in his retreat
To Tauris or Casbeen."

MILTON.

THE sixteenth century was dominated by Spain and Portugal. Before dealing with the successful efforts of the Dutch and English to challenge their world hegemony, we turn to the Near East, where, a few years before the opening of the sixteenth century, the Ak Kuyunlu, or "White Sheep" dynasty, had built up a kingdom which included the western provinces of Persia and the eastern provinces of Asia Minor. Uzun Hasan had supported the claims of the Prince of Karamania (as Cilicia was then called) against the Turks, and had been defeated. Realizing that he could not hope for success without the co-operation of a naval power, he despatched an ambassador to Venice, whose reception is the subject of a magnificent painting by Caliari Veronese which is to be seen in that city. Diplomatic intercourse was thus established, and Venice, which was attempting with scant success to secure united action by Christendom, despatched ambassadors to the Court of Hasan.

In 1471 Josafa Barbaro,[1] charged with this mission, landed on the coast of Asia Minor and made for Tabriz. Like Xenophon, who suffered from the attacks of the Carduchi, Barbaro, when he entered the Taurus Mountains, was attacked by their descendants the Kurds, whom he terms the Corbi, "exceading crewell, and not so much thievishe as openly given to roberie . . . Having in my companie an Ambassador of the said Assambei (Hasan Beg), we were assaulted by the Corbi,

[1] *Travels of Venetians in Persia* (Hakluyt Society), 1873. The translation of the travels of Josafa Barbaro was made by William Thomas in the reign of Edward VI.

who slew the said Ambassador, and having hurte me and the rest, they tooke our sompters and all that they founde."

Josafa Barbaro, who reached Tabriz in rags, was well received by Hasan, and gives an interesting account of the court, the jewels and the "most beautiful carpetts". He accompanied Hasan to Isfahan, Kashan amd Kum. Thence he proceeded in the footsteps of Marco Polo to Yezd, which was at that period a flourishing city "with very great suburbes . . . they all arr wevers and makers of divers kindes of sylkes". Barbaro's descriptions of the tombs of the Achaemenian monarchs and of the Sasanian bas-reliefs near Persepolis are a masterpiece of quaint phraseology and misconception: "There is a mightie stone of one piece, on the which arr many ymages of men graven as great as gyaunts, and above all the rest of one ymage like unto that we resemble to God the Father in a circle. . . . A little further there is a great ymage on horsbacke, seemyng to be of a boysterouse man; who they saie was Sampson; about the which arr many other ymages apparailed of the frenche facon, with longe heares." [1] "Sampson" was Shapur, the captor of the Roman Emperor Valerian, who, with chains on his hands, appeals to the victor for mercy.

The rise of the Safavi dynasty in Persia as the successors of the "White Sheep" at the beginning of the sixteenth century was an event of great importance in world history. It reconstituted Persia as an independent and intensely nationalistic kingdom which, for religious and political reasons, was invariably hostile to Turkey. Consequently, as Busbecq, the ambassador of the Emperor, pointed out, Persia helped materially to save Europe from Turkish domination.

The founder of the dynasty was Shah Ismail, under whose successor, Tahmasp, Jenkinson travelled in Persia.

In the last chapter we have seen that the fruitless struggle to find a North-East passage resulted in the creation of a valuable trade with Russia. It was also hoped to reach Cathay by land. Anthony Jenkinson, who was Chief Factor of the Muscovy Company, and had accompanied Richard Chancelor, reappeared on the scene in Russia in 1557. He was well received by Ivan the Terrible, who had taken Kazan from the Tartars in 1552, and had followed up this important success by the capture of Astrakhan two years later, thus making the Volga a Russian river. In the spring of 1558, furnished with letters from the Tsar, Jenkinson started on a journey into

[1] For the description of these rock tombs with the figure of Ahura Mazda *vide* Sykes, *History of Persia*, Vol. I, p. 182.

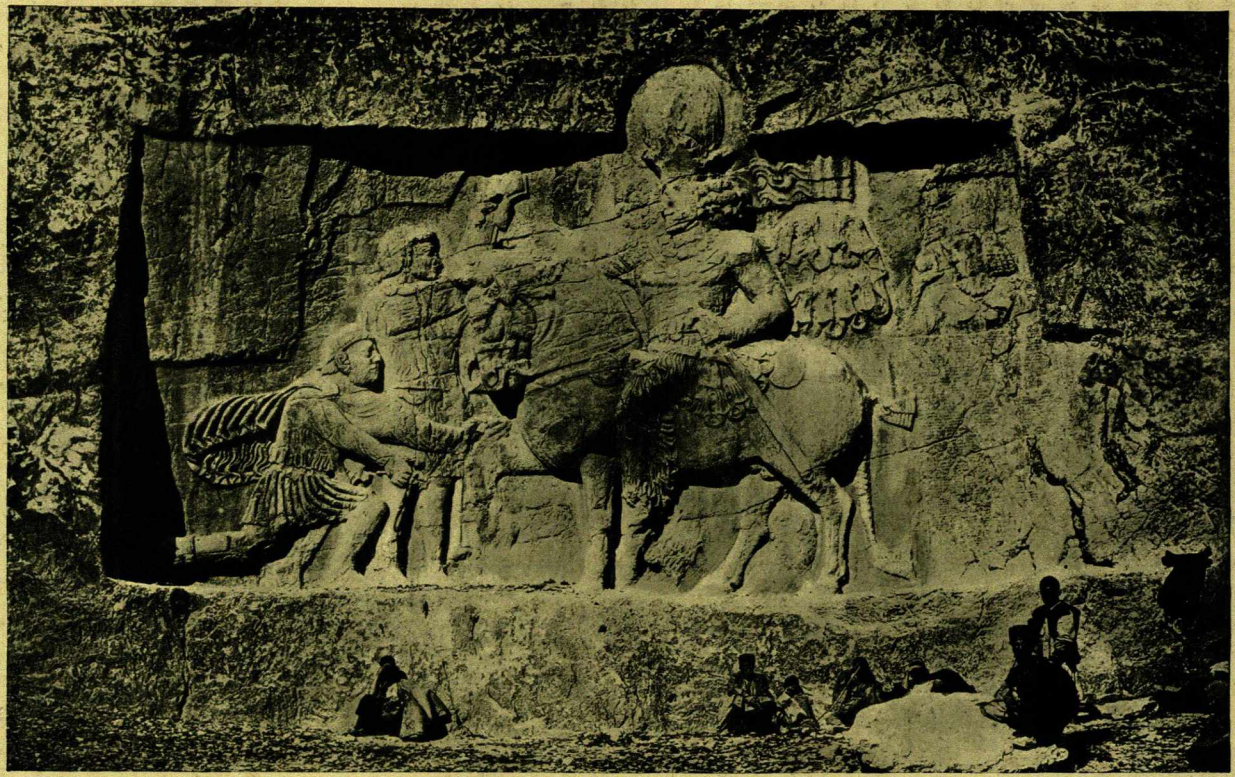
Central Asia towards Cathay. He first made for Nijni Novgorod, the seat of the annual fair. He then travelled with the Governor-elect of Astrakhan, who had "500 great boates under his conduct". He described Kazan as "a fayre towne with a strong castle. Being in the hands of the Tartarres, it did more vexe the Russes in their warres, than any other nation." Continuing his exploration, Jenkinson refers to the nomad tribes who, living on meat and milk, mock at Christians for eating bread, "saying we live by eating the toppe of a weede, and drinke a drinke made of the same". Lower down the river, reference is made to the sturgeon fishing, and in due course Jenkinson reached Astrakhan, where he described the trade as "so small and beggarley, that it is not worth while the making mention". From Astrakhan he sailed along the east coast of the Caspian, passing the mouth of the Ural River and landing at Mangishlak, he hired camels, and crossed the desert for twenty days. "We found no water, but such as we drewe out of olde deepe wells, being very brackish and salt." He describes Urganj, which had been destroyed by Chengiz, and adds "there are many wilde horses, which the *Tartars* doe many times kill with their haukes".

From Urganj, Jenkinson followed up the Ardocke, as he calls the Amu Darya or Oxus. He was attacked by a "prince banished from his Countrey", and "had it not been for 4 hand gunnes, we had been overcome and destroyed".

He finally reached Bokhara, of which he writes: "There are many houses, temples and monuments of stone, sumptuously builded, and gilt, and specially bathstones so artificially built that the like thereof is not in the worlde." This is clearly a reference to the beautiful tiles, which I have admired at Bokhara and Samarkand.

In the spring of 1559, Jenkinson returned to the Caspian and sailed back to Astrakhan. True Englishman that he was, he writes: "During the time of our navigation, wee sette uppe the redde crosse of St. George in our flagges." It is worthy of note that, during the Great War, the white ensign was flown on the Caspian Sea, where the British Navy gained fresh laurels. In the autumn, Jenkinson returned to Moscow and presented Ivan with a "white Cowes taile of Cathay" —actually a yak's tail. He also handed over various ambassadors from Central Asia "with all the *Russe* slaves". His expedition had been crowned with success.

In April 1562 he sailed down the Volga with the object of opening up trade with Persia. From Astrakhan, weathering



SHAPUR AND THE CAPTIVE VALERIAN
(From Sarre and Herzfeld's Iranische Felsreliefs)

[*face p.* 150

a severe storm in the Caspian, he reached Derbent, where he refers to the famous fort, "now under the power of the Sophie[1] of Persia", which is one of the strongest castles I have seen. Upon landing at a port farther south, Jenkinson was most hospitably received by Abdulla Khan, King of Shirwan, whom he found in his summer camp; and he was provided with an escort to the Persian Court at Kazvin, which city is referred to as Casbeen in the motto to this chapter.

Starting from Shamakhi, Jenkinson makes one of the earliest references to Baku, and traversing "a fruitful countrey, inhabited with pasturing people", he reached Ardebil. There he visited the tomb of Ismail, who "lieth buried in a faire Meskit (mosque) with a sumptuous sepulchre".

Jenkinson duly reached Kazvin, and gives a vivid account of his reception by Shah Tahmasp: "I delivered the Queenes majesties letters with my present, which he accepting, demanded of me what countrey of Franks I was: unto whom I answered that I was of the famous Citie of London and was sent for to treate of friendship, and free passage of our merchants and people." The question of religion was inevitably brought up by the fanatical Shah, who, learning that the Englishman was a Christian, replied: "We have no neede to have friendship with the unbeleevers, and so willed mee to depart." Indeed, it might have gone hard with Jenkinson, since the Shah was inclined to send his head as a suitable gift to the Sultan of Turkey, with whom peace had just been concluded. But Abdulla Khan of Shirwan wrote that "if he used me evill, there would few strangers resort into his countrey".

Jenkinson finally returned to Moscow with raw silk and dye-stuffs for the Muscovy Company, and with precious stones and silk brocades for the Tsar. The brave attempt to trade across Russia to Persia was continued, but anarchy, storms and pirates brought it to an end in 1581. Jenkinson, the first Englishman to descend the Volga, to navigate the Caspian and to visit Bokhara, was one of the great Elizabethans, whose journeys enlarged the outlook of his fellow-countrymen. Milton was certainly indebted to him in connection with the lines already quoted, while Marlowe as certainly refers to him in *Tamburlaine the Great*:

> "And Christian merchants, that with Russian stems
> Plow up huge furrowes in the Caspian Sea,
> Shall vaile to us, as Lords of al the Lake."

Among the celebrated English travellers in Persia were

[1] The term Sophie is a corruption of Safavi, the name of the dynasty.

the Sherley brothers, who, accompanied by a large staff, reached Kazvin in 1598. Upon the return of Shah Abbas, the greatest of the Safavi monarchs, from a successful campaign against the Uzbegs, they presented themselves as English knights, who had heard of his fame, and desired to enter his service. With the assistance of their gun-founder, the Sherleys created a regular army for Shah Abbas, who had hitherto depended entirely on tribal cavalry, which could not defeat the highly trained Turkish army. Sir Anthony Sherley was despatched as Persian Ambassador to the Courts of Europe, where he had a chequered career, but Sir Robert Sherley remained in Persia, and had the pleasure of leading the charge in which the new Persian army defeated the Turks. He, in his turn, was despatched as an ambassador to the Courts of Europe, and is probably alluded to in *Twelfth Night*, where Fabian says, "I will not give my part of this sport for a pension of thousands to be paid from the Sophy."

The seventeenth century was one of extreme importance in world history. At the beginning of the period Spain and Portugal, entrenched behind the Treaty of Tordesillas, had built up great empires and a lucrative commerce, albeit not without straining to the utmost the populations and resources of these two states. The inability of England and Holland to challenge this monstrous agreement in the sixteenth century is proved by the painful and fruitless search for a passage to the Spice Islands and Cathay across the ice-bound Arctic. As the years passed, England became more powerful at sea and developed fast-sailing handy ships, mounting heavy guns which fired at comparatively long ranges. When the inevitable clash occurred, in 1588, the "Invincible Armada" was outmatched, and, by its defeat, the ultimate freedom of the ocean highways was assured.

Portugal and Spain at this period furnished excellent illustrations of the French proverb *Qui trop embrasse mal étreint*. Moreover, the splendid Portuguese and Spanish navigators of the fifteenth and sixteenth centuries had few successors in the seventeenth. Their amazing efforts had apparently exhausted the two countries, which gradually retired into the background.

The protagonists in the quest for power and commerce in Eastern waters were the Dutch and the English, and the causes that led to their commercial activities are of exceptional interest. As mentioned in Chapter XII, Antwerp had been the chief centre of the spice trade in Northern Europe, but after its fall in 1585, Amsterdam took its place. At this period

the Dutch were forbidden to trade with Lisbon by Philip II, under whom, from 1580 to 1640, Portugal was united to Spain. Faced with ruin to their trade, the Dutch, in 1595, profiting by the defeat of the Armada, boldly despatched a fleet which reached Java and returned safely. After this pioneer venture, large fleets sailed annually to Eastern waters, and by the formation of the United Company, to which sovereign powers were delegated, a powerful instrument of conquest and colonization was created. Among the promoters of these expeditions was Linschoten, whose *Itinerario* was a veritable gazetteer of information on the Portuguese Empire.

The Dutch attacked the Portuguese wherever they met them. In the Moluccas they ultimately succeeded in driving them out, though the Portuguese, supported by the Spanish, fought desperately. In the course of a single generation the Dutch, who captured Malacca in 1641, had expelled the Portuguese from Ceylon and from the southernmost parts of India, while they had firmly established themselves in the Malay Archipelago, which became, and still remains, the seat of their power.

We now come to the appearance of the English in the East. Having failed to discover a passage across the Arctic, after negotiations had been carried through in Constantinople for " capitulations " similar to those enjoyed by other nations, Queen Elizabeth issued letters patent for the establishment of the Levant Company, in 1581.

At this period adventurers bound for India usually travelled by land and, from Aleppo, took a route across the desert to a point on the Euphrates near ancient Babylon or followed the Great Desert Route to Basra. In 1580 John Newbery was the first Englishman to make this journey. He reached Hormuz, where he studied the commercial prospects for some weeks. He then crossed to Gombroon (Bandar Abbas) and turning homewards was again the first Englishman to traverse Persia, visiting Shiraz, Isfahan and Tabriz. He thence travelled to Constantinople and reached England *via* Poland and Dantzig.

In 1583, Newbery headed an important expedition under the recently created Turkey Company, and sailed from London in the *Tiger*.[1] From Aleppo, where two members of the party established themselves, Newbery, Fitch and two other merchants continued the journey to Hormuz. On this occasion

[1] Did not the First Witch in *Macbeth* say, " Her husband's to Aleppo gone, master of the Tiger " ? Shakespeare evidently thought that Aleppo was a port!

the Portuguese Governor arrested them and sent them to Goa as prisoners. Managing to make their escape they reached Agra, where Newbery probably presented the Queen's letter to Akbar. He then decided to return home and apparently died on the way. Much credit is due to this great English pioneer. We consequently rely on Fitch who, if he has usurped some of the credit due to Newbery, was also a great explorer.[1]

Fitch's description of Agra and Fatehpur Sikhri runs as follows. "Agra and Fatepur are two very great cities, either of them much greater than London and very populous. Hither is the great resort of the merchants from Persia and out of India, and very much merchandise of silke and cloth, and of precious stones, both rubies, diamants, and pearles." Reaching Kuch Behar, he writes: "I went from Bengala into the country of Couche. The King is a Gentile; His country is great and lieth not far from Cauchin China. They poison all the waters if any war be." From Serrepore on the Ganges, the intrepid Englishman sailed for Pegu in November 1586. Crossing the bar of the Irrawaddy, "we came to Cosmin (Bassein) which is a very prettie towne. The people be very tall and well disposed; the women white, round faced, with little eies. The houses are high built, set upon great high postes, and they go up to them for fear of the tygers. The countrey is very fruitful. Here are very great figs, oranges, cocoes, and other fruits." Among the King's elephants, "he hath foure white elephants, which are very strange and rare". This King in his title is called the "King of the White Elephants". Among the curious customs which Fitch carefully noted was that "they have their teeth blacked, both men and women; for they say a dogge hath his teeth white, therefore they will black theirs".

From Pegu Fitch sailed to Malacca, "where the Portugals have a castle which standeth nere the sea", and bore testimony to the extent of its commerce. In 1588, on his return voyage, he sailed back to Bengal, whence Ceylon, "a brave island, very fruitful and faire", was visited. Here again at Colombo "the Portugals have their fort, with an hundred thousand men, and many elephants". From Ceylon "we passed by Coulam (Quilon), which is a fort of the Portugals; from whence cometh great store of pepper". Continuing his journey homewards, he more or less followed his outward route. Fitch reached England in 1591, "having been eight yeeres out of my native countrey". The information he gave was of the

[1] *England's Quest of Eastern Trade*, by Sir William Foster, 1933.

greatest value to the East India Company when it was constituted, and we cannot but admire the courage and initiative displayed by this sturdy English merchant-explorer.

Our ancestors were anxious to reach the Spice Islands, but one or two pioneer voyages had been unsuccessful and the Dutch outstripped them in the race. Indeed the English, who were slowly preparing to imitate their rivals, were undoubtedly influenced by the commercial policy of the Dutch who, in 1599, raised the price of pepper from three shillings to six and eight shillings per pound. The merchants of London had already petitioned Queen Elizabeth, who, on December 31, 1600, granted a charter to the East India Company, as it was ultimately named.[1]

In 1601, James Lancaster, who had led an unsuccessful expedition a decade earlier, sailed in command of four "tall ships", with John Davis of Arctic fame, who had already served as Chief Pilot in a Dutch expedition. After touching at Table Bay and at a port on the coast of Madagascar, the sunken reefs of the Chagos Islands were successfully avoided and the Nicobar Islands reached. A good cargo of pepper was secured at Bantam, where agents were stationed, as also at the Moluccas, and, in the autumn of 1603, the squadron reached England with a rich cargo, which included 1,000,000 pounds of pepper. In the second voyage, commanded by Henry Middleton, the Moluccas were reached, but the unfriendliness of the Dutch, who captured the Portuguese forts at Amboina and Tidor, created serious difficulties.

In 1607 William Hawkins commanded a ship in which he sailed to Surat and travelled inland to the Court of the Emperor Jahangir. He was well received by the Great Moghul, but Portuguese influence was too strong, and he was obliged to leave. He gained, however, much valuable information about the trade of the country and the Court.

In 1614 the Portuguese attacked the English, who were anchored in a harbour situated to the north of the mouth of the Tapti River, known as Swally Hole. In spite of their great superiority of force, the Portuguese were repulsed; and by 1619, thanks to the personality and activities of Sir Thomas Roe, the first envoy to be accredited to the Moghul Court, factories were established at Surat, Agra, Ahmadabad and Broach.

[1] For this section I have consulted *Letters Received by the East India Company*, edited by Sir William Foster; *A History of Geographical Discovery in the Seventeenth and Eighteenth Centuries*, by E. Heawood, 1913; and *The Cambridge History of India*, Vol. V, 1929.

The factors at first sold their broadcloth to the Moghul courtiers, but could not find a regular market for it in Eastern waters. At this juncture Richard Steele, who had travelled by the desert route from Aleppo to the Euphrates and thence to the Persian Gulf, arrived in India. He reported that, in Persia, they might feel sure "of the vent of much cloth, in regard their country is cold". Steele also added that silk could be purchased fifty per cent. cheaper than at Aleppo. With admirable initiative, representatives of the Company were despatched to Isfahan to secure the necessary *farman*, and in 1616 a trial cargo was landed at Jask. The Portuguese attacked the English ships off Jask in 1620,[1] but were decisively beaten, and two years later the English, in alliance with Persia, captured the fort at Hormuz. This was the first great feat of arms of the English in Eastern waters.

John Jourdain was among the important travellers of this period. Sailing in 1608, he gave the earliest account of the Seychelles, where I first realized the overpowering beauty of the tropics. He also travelled to Sana, and was thus the first English explorer of Yemen. To his credit also must be placed the discovery of "Swally Hole". After travelling to the Spice Islands to purchase pepper and cloves, Jourdain was killed by the Dutch. His *Journal*[2] is full of interesting information about the struggle for the spice trade.

Finally, Pietro della Valle deserves mention among these travellers. Starting from Venice in 1614 with the intention of visiting the holy places of the East, he travelled by Damascus to Aleppo and Baghdad, thence proceeding to the Court of the Shah. He gives an interesting description of the ruins of Persepolis, which he was the first modern traveller to identify, and reaching the Persian Gulf by Shiraz and Lar, he travelled extensively in India.[3]

Shortly after the capture of Hormuz, Sir Thomas Herbert[4] entered Persia from the south. Landing at Bandar Abbas, Herbert travelled to Shiraz by way of Lar. Shiraz delighted him, as it had Ibn Battuta before him, and, upon leaving it, he wrote a charming charistery or "Song of Thanksgiving" in praise of the city of Sadi and Hafiz. Continuing his journey,

[1] For an account of the struggle with the Portuguese in the Persian Gulf *vide* Sykes, *History of Persia*, Chap. LXIV.

[2] *John Jourdain's Journal of a Voyage to the East Indies, 1608–17*, edited by Sir William Foster (Hakluyt Society), 2nd series, Vols. I and II.

[3] Vide *The Travels of Pietro della Valle to India*, ed. by E. Gray (Hakluyt Society), Vols. LXXXIV and LXXXV.

[4] *Travels in Persia*, by Sir Thomas Herbert, edited by Sir William Foster (Broadway Travellers).

Herbert gives an excellent description of the palaces and parks of Isfahan, one of which he compares to Fontainebleau. The *Maydan* or Royal Square he describes as, "as spacious and aromatic a market as any in the universe, resembling our Exchange, or the Place-Royal, but six times larger". It served as the polo ground, and the stone goal-posts still survive intact. From Isfahan the Mission travelled north to Ashraf, situated on the Caspian Sea, where Shah Abbas received the Ambassador.

Herbert is generally interesting, as, for example, when he writes: "Choava-berry (coffee) is much drunk, though it please neither the eye nor the taste, being black as soot and somewhat bitter, or rather relished like black crusts", "and again when he sums up the Persians: "They are generally well-limbed and straight; the zone they live in makes them tawny; the wine cheerful; opium salacious. The women paint; the men love arms; all affect poetry."

In the latter half of the seventeenth century, we have the instructive works of Tavernier and of Bernier. Of even greater value was Chardin, who learned to read and to speak Persian and who made a really serious study of the country between 1665 and 1677.[1] Chardin, who left Paris in 1671 on his second journey to Persia, gives a vivid description of the dangerous state of affairs in Constantinople, owing to the French Ambassador being on bad terms with the Grand Vizier. He landed in Mingrelia where "the Gentlemen of the Country have full power over the Lives and Estates of their Tenants, with whom they do what they please. They seize upon 'em, whether Wife or Children; they sell 'em, or dispose of 'em otherwise as they think fit."

Chardin gives an admirable description of Georgia, at that time tributary to Persia, where he was hospitably received by the Prince, and assisted at gargantuan banquets. He reached Isfahan in safety and, while his chief business was to extract payment from the Shah for his jewels, he wrote by far the best description of Persia that has come down to us from the seventeenth century. In his company we may attend the solemn audiences granted to foreign Envoys, and the sumptuous banquets, where the value of the gold plate was duly apprized. Elsewhere we are taken behind the scenes and realize the desperate intrigues and the cruelty of the drunken Shah. In addition we have chapters on the geography, climate, soil and customs,

[1] Vide *The Travels of Sir John Chardin into Persia and the East Indies*, 1686, Argonaut Press, 1927.

which no student can afford to neglect. Among many delightful passages we select the following: "There is such an exquisite Beauty in the Air of *Persia*, that I can neither forget it myself, nor forbear mentioning it to everybody. One would swear that the Heavens were more sublimely elevated, and tinctur'd with quite another colour there, than they are in our thick and dreary *European* climates."

Chardin returned to France after his adventurous travels, but, on the revocation of the Edict of Nantes, he settled in England. He was knighted by Charles II, and, on his death, a tablet was erected to his memory in Westminster Abbey bearing the inscription *Sibi nomen fecit eundo*.

In no part of this work has it been found harder to refrain from quoting at length from the vivid narratives of these great travellers, whose heroic achievements added lustre to the period, and the charm of whose writings has seldom, if ever, been surpassed.

CHAPTER XVIII

THE PENETRATION OF CHINA AND TIBET IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES

> "You must know that as the Kingdom of Tibet is very mountainous, the water draining off the mountains forms rivers, especially there is one which flowing from West to East traverses the centre of Third Tibet, and then, turning to the South-East, at last this principal river flows into the Ganges."
>
> *Desideri on the Tsangpo or Brahmaputra.*

In Chapter X, brief reference was made to John de Monte Corvino, the first Archbishop of Peking, and to Friar Odoric. On the fall of the short-lived Mongol dynasty, in 1370, intercourse with China ceased until the ships of the Portuguese appeared in her ports. Albuquerque, at the capture of Malacca in 1511, established good relations with the Chinese captains of some trading junks, and in 1514[1] a Portuguese ship was despatched to Canton to open commercial relations with the Celestial Empire. Landing was not permitted, but the Portuguese sold their spices at a good profit.

Shortly afterwards a mission was despatched, but, before it was received at Peking, the Portuguese had made themselves detested by kidnapping Chinese children for slaves and by other misdeeds. The Emperor, enraged at the insolence of these "outer barbarians", sentenced twenty-three Portuguese to be executed at Canton in 1523, while the envoy died in prison. As a sequel to these events China was closed to European traders. In 1522, St. Francis Xavier landed at Chang-chuen-shan off the coast of Kwang-tung, which served as a port for the Europeans, who were not admitted to the mainland. He fell sick and died shortly afterwards.

At the beginning of the seventeenth century a new and happier era was opened by the arrival at the Chinese Court in 1598 of Matteo Ricci, a Jesuit.[2] At first the Emperor was inclined to expel him, but his pleasing personality and know-

[1] *Letters from Portuguese Captives in Canton*, by Donald Ferguson, 1902.
[2] *Early Jesuit Travellers in Central Asia*, by C. Wessels, S.J., 1924.

ledge of astronomy gradually won him universal esteem, and in 1601 he was able to establish himself at Peking. He set to work to explore China and published a European map with Chinese names which has come down to us. Thanks to the influence of Ricci, the Jesuits began a survey of the whole country. At first they surveyed the plain south of Peking, but in 1708 their operations were extended to the Great Wall and ultimately included part of Manchuria, during which the Amur was crossed. Year by year the survey spread over the eastern provinces, beginning with Shantung, until gradually it came to include the greater part of China. Nor were they defeated by Tibet, which was partially surveyed by two Lamas, who were trained by the Jesuits. The results of these valuable explorations were published in Paris together with maps by D'Anville, in 1735.

The deep interest taken in exploration by Ricci in China, was shared by the Fathers in India. Reports reached them of the existence of large numbers of Christians in Cathay, and it was decided to despatch a mission to seek them out, and to ascertain definitely whether or no Cathay was China.

Bento de Goes, a lay Jesuit, was selected for the expedition, of which Philip II of Spain approved. Still more valuable was the support of the Emperor Akbar, who furnished Goes, for whom he had both liking and respect, with valuable letters of recommendation and with gold. Goes travelled *via* Peshawar to Kabul, hearing on the way tales about the Kafirs, who wore black clothes and drank wine, this being the earliest mention of these pagan Aryans of the remote valleys of the Hindu Kush.

The explorer crossed that mountain barrier not without difficulty, and reached Talikhan. He then followed in Marco Polo's footsteps up the Oxus Valley to Badakshan, and crossing the Pamirs, where "both men and beasts felt oppressed beyond endurance and gasped for breath", he reached the Sarikol Valley.[1] He nearly lost his life on the Chichiklik Pass from the cold, but reached the fertile oasis of Yarkand safely.

Goes was detained for a year at Yarkand pending the organization of the annual caravan to Cathay. He took advantage of the delay to visit Khotan, and writes: "There is no article of traffic more valuable than lumps of a certain transparent kind of marble, which we, from poverty of lan-

[1] For the Aryans of Sarikol vide *Through Deserts and Oases of Central Asia*, p. 148 *et seq.* For Khotan, see *op. cit.*, p. 209.

guage, usually term jasper. These marbles are called by the Chinese Jusce." This is an accurate description of *Jusce*, more exactly *Yu-shih* or Jade Stone; and Khotan is more correctly termed *Yu-tien* or "Jade Country".

Leaving Yarkand in November 1604, Goes travelled by way of Turfan. He then crossed the Gobi to the "Jade Gate" of the Great Wall. At Suchow, where the explorer arrived at the end of 1605, he fell ill, and after receiving the visit of an emissary from Ricci, he died in April 1607. Perhaps it was just as well. He had indeed discovered that Cathay was China, but Ricci had already proved this to be the case. In 1931, the grave of this intrepid explorer was discovered and photographed by Miss Mildred Cable, an intrepid member of the China Inland Mission.[1]

In 1624, Antonio de Andrade, who was at Delhi, heard of an exceptional opportunity of following the quest for lost Christian communities in Tibet, owing to the organization of a Hindu pilgrimage to distant Badrinath. He and a brother Jesuit joined the caravan disguised as Hindus, and were the first Europeans to cross the Himalayas from India and to reach one of the principal sources of the Ganges, situated underneath mighty Kamet, rising to 25,447 feet, which was scaled by Smythe in 1931.

From Badrinath the explorers crossed the Mana Pass, at an altitude of 18,300 feet, and arrived safely at Tsaparang, the capital of Guge, situated in the valley of the Upper Sutlej. Andrade found that there were no Christians to be rescued, but considering Tsaparang to be a fruitful field, he decided to found a mission. The King was most favourable to the Jesuits, but this naturally created intense jealousy among the Lamas, whose chief was the King's brother. The result was a rebellion, supported by the King of Ladakh, who seized the friendly monarch and broke up the mission.

Nearly a century later, Ippolito de Desideri[2] was fired with the determination to reopen the Jesuit mission in Tibet. Starting from Delhi in 1714, with another Father named Freyre, he travelled to Kashmir by the Pir Panjal route and noted the caravanserais at each stage. Some of them are indeed delightful pleasaunces built by the Moghul Emperors overlooking the Chenab. From Srinagar, Desideri travelled eastwards to Ladakh, and he gives an excellent account of a *iuhla* bridge which will appeal to all travellers in that country.

[1] *Journal of the Royal Central Asian Society*, Vol. XX, Part II, April 1933.
[2] *The Travels of Ippolito Desideri*, edited by Filippo de Filippi (Broadway Travellers), 1932.

"From one mountain to the other two thick ropes of willow are stretched nearly four feet apart, to which are attached hanging loops of smaller ropes of willow about one foot and a half distant from one another. One must stretch out one's arms and hold fast to the thicker ropes while putting one foot after the other into the hanging loops to reach the opposite side. With every step the bridge sways from right to left, and from left to right. Besides this, one is so high above the river and the bridge is so open on all sides, that the rush of water beneath dazzles the eyes and makes one dizzy."

I myself recollect that my Indian servant howled with fear at his first experience of one of these bridges, which he finally crossed on his knees with two Tibetans to help him along. Nor did I enjoy my own first crossing of a *juhla* bridge. Desideri also feelingly described his escape from an avalanche, while he suffered more than once from painful snow-blindness.

The King of Leh treated the Fathers most kindly, so much so that Desideri was tempted to stay there. But Freyre, accustomed to the climate of India and worn out with fatigue, determined to abandon the enterprise. He did not, however, wish to return by Kashmir, with its difficult passes. Accordingly he made inquiries and ascertained the existence of a still greater Tibet, with its capital at Lhasa. His decision to return to India by Lhasa led to the important exploration of Southern Tibet.

On August 17, 1715, Desideri continued his great journey. His route lay close to the Panggong lake, which was the farthest point reached by me in 1890. On September 7, the explorers arrived at Tashigong, a strong fortified post on the frontier between Ladakh, which is called Second Tibet, and Third Tibet.[1] The onward journey lay across "a vast, sterile and terrible desert, to cross which takes about three months". A body of Tartar and Tibetan troops, who were garrisoning neighbouring Gartok, were returning to Lhasa, under the command of the widow of their chief, and fortunately this Tibetan lady "esteemed it a great honour to be able to assist two Lamas from a distant land". The missionaries started from Gartok in mid-October, and "arrived at the highest point reached during the whole journey in this desert. Close by is a mountain of excessive height . . . most horrible, barren, steep, and bitterly cold." This mountain was Kailas Parbat, which rises to 22,000 feet, while the pass which separates the Indus from the Tsangpo system was crossed at an altitude of 16,000 feet on November 9.

[1] Desideri called Baltistan "First" or "Lesser Tibet", while Ladakh he named "Second" or "Grand Tibet". To-day Ladakh is termed "Lesser Tibet".

By January 4, 1716, the explorers had safely crossed the desert and reached Saka Dzong, " a big place and well fortified as beseems a frontier town ". The ordeal had been terribly severe, and, during one march, Freyre, who had stayed behind with his worn-out horse, was nearly frozen to death. Indeed the description given by Desideri of the total lack of supplies on the way, the scarcity of dried dung, which constitutes the only fuel, and the unwholesome water, has been fully corroborated by modern travellers. The onward journey lay through Sakya, Shigatse and Gyantse, and, on March 18, 1716, Desideri entered Lhasa, " one year and a half since our departure from Delhi ".

Desideri was not the first European to reach Lhasa. Odoric and later Grueber had crossed Tibet from China and had passed through the sacred city. Moreover, it was the centre of a recently established Capuchin Mission, although the representatives of that order had temporarily abandoned it. But Desideri lived in Tibet for five years, and was the first European to study the literature, the religion, the geography, the customs, the flora and fauna of that country.

This chapter may be concluded with Desideri's account of polyandry, of which he writes :

> " The bridegroom knows when the wedding is to be, but not the bride, who tries to escape, cries, screams, kicks, tears her hair, but is dragged to the door of her future abode. On the threshold stands the bridegroom with the professor of magic, who recites spells for the success of the marriage, and the defeat of all evil spirits. He then gives a small piece of butter to the bridegroom, who smears it on the head and hair of the bride. . . . He performs this rite not only for himself, but for all his brothers big or little, men or boys, and she is recognized and regards herself as the legitimate wife of them all."

Such is marriage in this fantastic land.

CHAPTER XIX

THE DISCOVERY OF SIBERIA AND JAPAN

> "Now the Sable is a beast full marvellous and prolific, and it is found nowhere else in the world but in Northern Siberia . . . a merry little beast it is, and a beautiful; and its beauty comes to it with the snow, just as with the snow it disappears. And this is the beast that the ancient Greeks and the Romans called the Golden Fleece."
>
> SPATHARY.

IN no part of Asia has there been so rapid an advance in exploration as that made by Russia in Siberia, an advance which ultimately solved problems which had defeated Arctic explorers, and opened up for colonization a country which compares in its extent and natural resources with the Dominion of Canada.[1]

In Chapter XVII Jenkinson made a reference to the conquest of the valley of the Volga by Ivan the Terrible. This marked the turning-point in the relations of Russia with Asia, and it was from this base that Russia advanced into Siberia. In 1558 the Tsar granted a charter to the Stroganov family, which had built up a lucrative trade in furs. It included a large grant of land on the Kama Valley, which led up into the Ural Mountains.[2] Stroganov founded several settlements and enlisted Yermak, chief of a band of robbers, who in 1579, at the head of some 5,000 men, attacked the principal Tartar chief, Kuchum Khan, and defeated him on the banks of the Irtish. He then occupied Sibir, laid his conquest at the feet of the Tsar, and was subsequently killed by the Khan in a night attack. Yermak will remain for all time among the greatest heroes of Russia, and his amazing career is summed up by Baddeley in the verse:

> "Death-doomed, by wrath of dread Ivan,
> Yermak makes eastward, boat and man,
> Down Asian rivers—nor in vain—
> Conquers a realm, is pardoned, slain."

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[1] Among my authorities are *Russia, Mongolia, China*, by John F. Baddeley, 1919. Mr. Baddeley has read this chapter and made valuable suggestions.

[2] At the point where the railway crosses the Ural Mountains, I found to my surprise that they were a mass of rolling hills, and in no sense constituted a barrier, as I had been taught when I was young.

The advance eastwards, in which the fur-traders and Cossacks played the leading part, was amazingly rapid. As in the case of Canada, the magnificent river system helped the pioneers, since although the great rivers, with the solitary exception of the Amur, flowed north, their tributaries flowed at right angles and almost touched one another at various points. Moreover, the native tribes were comparatively weak and offered little resistance.

Tobolsk was founded close to Sibir in 1587 and became the capital of a province which extended to the Ob. Tomsk was founded in 1604 in the upper valley of the Ob, and the explorers crossing by portage to the Yenisei, followed it down for hundreds of miles, and founded Turukhansk close to the Arctic Circle, at the junction of the Lower Tunguska with the Yenisei. They then went up this great tributary due east and struck a feeder of the Lena, down which, in 1632, they sailed to the Arctic Ocean.

An advance farther south struck the Upper Yenisei, where Yeniseisk was founded in 1619. Proceeding up the valley, the Angara River was reached, where the Buriats offered some resistance, but the Russians pressed on and discovered Lake Baikal. Skirting the east side of the lake, the upper valley of the Lena was reached, where Yakutsk was founded, in 1632, in territory owned by the Yakuts, who were driven north by the merciless Russian pioneers. From Yakutsk the explorers pushed on to the east, and, crossing the range which bounds the Lena Basin, founded Okhotsk in 1638. In some fifty years, these fearless pioneers had crossed Northern Asia to the Pacific Ocean.

Farther north, the Kolyma River was discovered, and this extraordinary epoch of exploration was crowned by Deshnev, who sailed from the Kolyma River round the extreme north-east point of Asia, which is called Cape Deshnev. He thus discovered the Strait dividing Asia from America, belief in which had hitherto been based merely on conjecture.

In 1643 a Cossack, Poyarkof by name, led an expedition from Yakutsk eastwards over the divide, and, descending tributary streams, finally discovered the Amur; after a voyage of three months he reached its mouth.

At the end of the seventeenth century Russian Cossacks explored Kamchatka. A fort was constructed on its river, and the country subjugated by barbarous methods, but it was not until 1716 that its west coast was explored.

Among the leading travellers of this period was a Moldavian

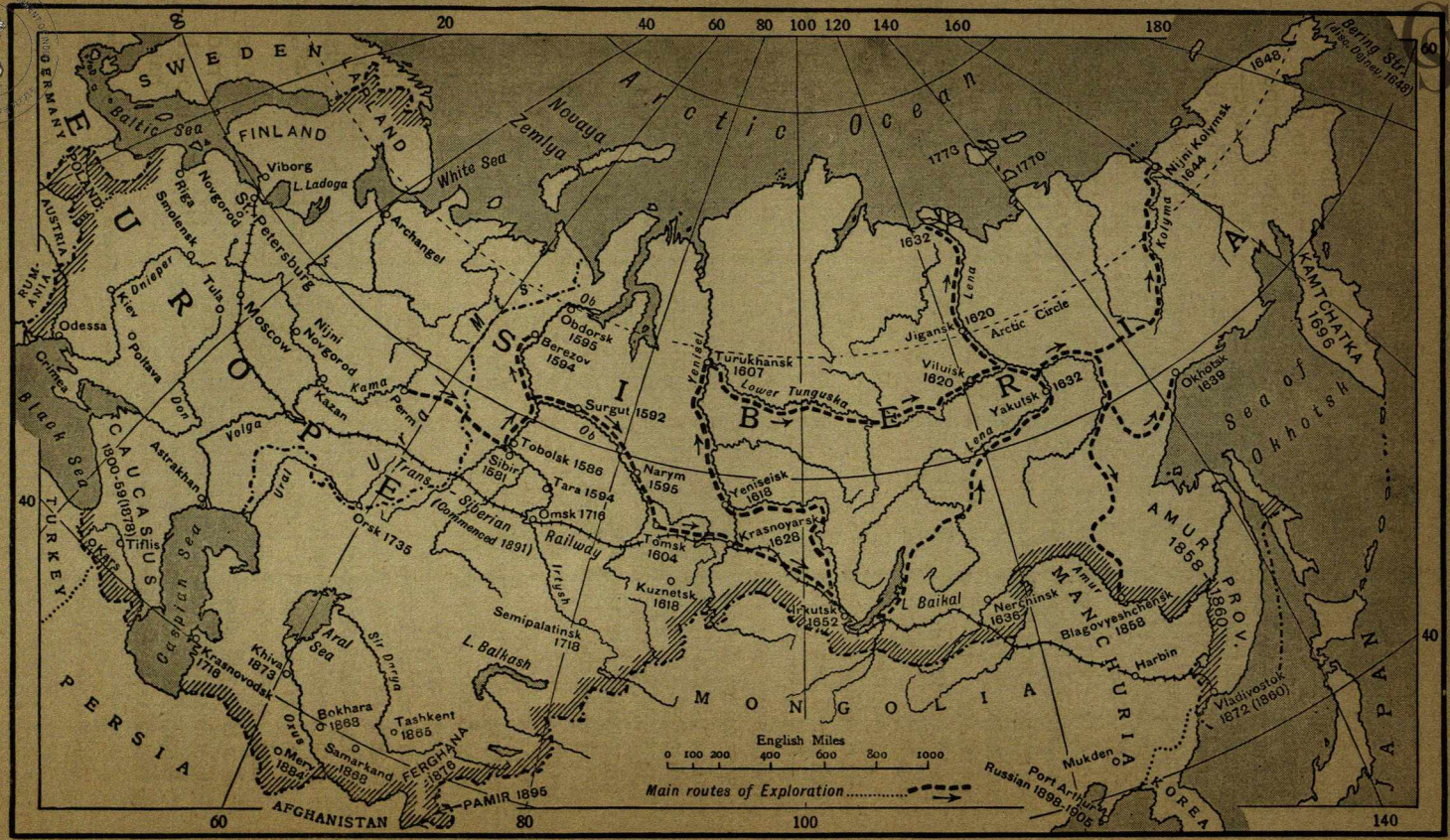
who is known as Spathary. In 1678 he set out for China as Russian Ambassador, and gives a clear account of his journey through Tomsk, Yeniseisk, and thence up the Angara to Lake Baikal. "Nowhere", he writes, "is Baikal so narrow as opposite the mouth of the Angara, where there is no harbourage—nothing but cliffs and rocks; in a word, it is very terrible, for all around are lofty snow-covered mountains, impenetrable forests and rocky precipices." Continuing the journey Selenghinsk, situated on the Mongolian frontier, was reached in October, and Nerchinsk in December; the Chinese frontier was crossed shortly afterwards. From Tobolsk to Selenghinsk, with the exception of a single portage of some twenty miles from the Ob to the Yenisei, Spathary had travelled entirely by water. From Selenghinsk onwards he journeyed by land. No traveller of the period gives such a good description of the country, its inhabitants and its products. However, Spathary was unable to negotiate a treaty with the Chinese, and Russia, after suffering defeat at the hands of the Chinese, agreed to evacuate the valley of the Amur in 1689.

It is interesting to note that the return embassy despatched by China was accompanied by a Jesuit, Gerbillon, who visited Nerchinsk, where the agreement referred to above was signed. In a subsequent journey he reached the junction of the Orkhon with the Tula, and gained valuable information about the Altai. He thus explored the country lying between China and Siberia, and ranks high among the explorers of Asia.

Peter the Great took a deep interest in exploration, and is reported to have said: "I have been thinking over the finding of a passage to China through the Arctic. On the map before me, there is indicated such a passage bearing the name of Anian.[1] There must be some reason for that. Now that the country is in no danger, we should strive to win for her glory along the lines of the Arts and Sciences." Bering, a Dane by birth, was selected for this important task. His instructions were to build boats and "to sail along the shore of Kamchatka which runs to the north and which (since its limits are unknown) seems to be a part of the American coast, and to determine where it joins with America".

In 1728, Bering sailed to Cape Deshnev, or East Cape as Cook named it, and as the land ended at that point, he turned back, having carried out his instructions, and sailed through the Strait which is called after him. He would probably have

[1] For the supposed Strait of Arian, *vide* Heawood's *Geographical Discovery in the Seventeenth and Eighteenth Centuries*, p. 121.



THE EXPLORATION AND CONQUEST OF SIBERIA.

(Reproduced from "The Universal History of the World", edited by J. A. Hammerton, by courtesy of the publishers, The Educational Book Co. Ltd.)

sighted the American shore on this expedition, but for the thick weather. At more than one point, natives who had heard of the Russians boarded the ship. They stated that they went to the Kolyma River " on deer and never by sea ", and Bering was blamed for not extending explorations to this river. In his second journey, undertaken in 1741, " a chain of high, rugged and snow-covered mountains loomed in view in latitude 58° 28′ ". Thus the coast of North America was discovered in this high latitude, and the width of the Strait definitely laid down. The return voyage followed the coast of Alaska for some distance. Intercourse was opened with the natives, and Steller the naturalist made a collection of plants. He also made valuable reports on the animal life and the inhabitants. Bering, who had been ill with scurvy and had lost control over his command, died and was buried in Bering Island. By these two voyages the chief problem of the Northern Pacific was solved.

At the beginning of the nineteenth century, Russia renewed her activities in the north of Siberia. In 1828, Erman systematically examined the country between the north of the Ural Mountains and the mouth of the Ob. But the most important expeditions were those of Middendorf, who, leaving Turukhansk in 1843, descended the frozen Yenisei and crossed the tundra to the Khatanga basin. He finally made for the Taimir Peninsula and reached the sea in August. Suffering cruelly from lack of supplies, he managed to bring back a valuable report on these practically unexplored lands.

In 1854, Muraviev led an expedition down the Amur and reopened it to Russian explorers, geologists and naturalists, among whom may be mentioned Radde. In 1864, Prince Kropotkin led an expedition across Manchuria from the Argun to the Sungari; and in 1876, he crossed the Tian Shan from Farghana to Kashgar.

Japan was known to Marco Polo as Chipangu, but was not visited by the great Venetian explorer. It was first discovered in 1542 by Portuguese adventurers in a ship which was carried in a storm past the ports of China to unknown islands. The inhabitants put off in boats to trade with the strangers, and informed them that the islands were called Nippon. In 1546, Ferdinand Mendez Pinto, author of the fascinating *Peregrination*, landed at " the isle of Tanixumas, which is the first land of Japan ". He was received most hospitably, and the adventurer won the favour of the governor by the gift of an arquebus, the first to be seen in Japan. Some years later Pinto

travelled with St. Francis Xavier, who preached in Japan from 1549 to 1551, and mentioned the presence of Portuguese vessels at Hirado.

We now come to the arrival in Japan of William Adams. In 1598, the first Dutch expedition to the Pacific reached the Straits of Magellan and was dispersed by storms. One ship, under its English pilot William Adams, crossed the Pacific and reached Japan. Here Adams, whose knowledge of shipbuilding and navigation was valued, became an influential personage, and was able to foster European trade with the kingdom of the Mikado. He married a Japanese wife and never returned to England.

In the eighth voyage of the East India Company, John Saris sailed in 1611 to the Moluccas, and continued his voyage to Hirado, where he was received by Adams. Saris, after establishing a factory, left Hirado for the capital with William Adams and ten other Englishmen. He was rowed through islands which " were well inhabited and divers proper townes built upon them. All along the coast, and so up to Osaka, we found women divers. These women would catch fish by diving, and that in eight fathome depth. We found Osaka a very great Towne, as great as London within the walls, with many faire timber bridges of a great height ". The castle was " marvellous large and strong, with very deepe trenches about it, and many draw-bridges, with gates plated with iron ".

From Osaka Saris travelled by land in a " Pallankin " to the capital Surunga (Sumpa). He was received with much courtesy by the Emperor, to whom he " delivered the King of England's letter and his present ". The Emperor agreed to most of the demands of Saris—indeed, owing no doubt to the influence of Adams, he displayed remarkable reasonableness in his dealings with the English captain.

Saris decided to pay his respects to the young king at Yezo, which city he described as " much greater than Surunga, farre fairer building; the ridge-tiles and corner-tiles richly gilded, and the posts of their doors gilded and varnished ". Here we have a reminiscence of Marco Polo's account of Japan, which is given in Chapter XIII. His reception was again most courteous, and he returned to Surunga, where a Spanish Ambassador had arrived to demand permission to round up all Spaniards and Portuguese. The reason was " the great want of men they had to defend the Molucca Islands from the Dutch, who then made great preparations for the absolute conquest thereof ". This demand was refused, the

Emperor replying that "his country was a free country". Saris was handed the reply of the Emperor to King James, which was couched in most friendly language, and the capable Englishman had every reason to be satisfied with his success as a diplomatist. The description of Japan in feudal times given by Saris is noteworthy, while his notes on currents and the monsoons, and his correction of the charts added materially to the knowledge of navigation in Eastern Seas.

In spite of European nations having opened up commercial relations with Japan, much uncertainty prevailed as to the geography of the country. In 1738 Martin Spangberg, a colleague of Bering, and Lieutenant Walton made a preliminary reconnaissance of the Kurile Islands, and in the following year, having been separated in the gale, they both reached Japan. Spangberg, on the return voyage, met the hairy Ainus, but the problem of Yezo was not yet solved.

One of the successors of Captain Cook was Captain François de la Perouse, a French officer, who in 1787 passed through the strait separating Japan from Korea. Later in the voyage, sailing northwards from Manchuria, the island of Sakhalin was sighted. On continuing his voyage, La Perouse was stopped by a submarine bank at the narrowest part of the channel. Accordingly he turned southwards and discovered the strait between Sakhalin and Yezo, which bears his name. Gallant La Perouse then sailed away into the Pacific, where his ships struck a reef and all hands were lost.

Captain Broughton, who had served under Vancouver, sighted Japan in 1796, near the strait which separated Yezo from the main island. By this discovery, supplementing that of La Perouse, the main geographical problems connected with Japan were solved.

CHAPTER XX

CAPTAIN COOK EXPLORES THE PACIFIC OCEAN

"We mean to travel to the antarctic pole,
Conquering the people underneath our feet,
And be renowned as never emperors were."

MARLOWE, *Tamburlaine the Great.*

"I flatter myself that a final end has been put to the searching after a southern continent, which has at times ingrossed the attention of some of the maritime powers for near two centuries past, and has been a favourite theme among the geographers of all ages.

"That there may be a continent or large tract of land, near the Pole, I will not deny; on the contrary, I am of the opinion that there is; and it is probable that we have seen a part of it."

CAPTAIN JAMES COOK.

THE question of the existence of *Terra Australis* or the Southern Continent has already been alluded to more than once in this work. It was strengthened by the belief of Magellan that Tierra del Fuego formed part of it, whereas the voyage of Drake actually proved the fallacy of the theory. Yet geographers were reluctant to abandon Ptolemy's views, which in this respect were based on mere conjecture and the belief in symmetry which he inherited from the Greeks. There was also a theory that a southern continent was needed to counterbalance Europe and Asia.

The seventeenth century opened with the discovery of Australia, due to Dutch enterprise.[1] New Guinea was already known, but little more, when, in 1605, the *Duifken* or *Little Dove*, commanded by Willem Janszoon of Amsterdam, sailed from Bantam "for the discovery of the land called Nova Guinea which, it is said, affordeth great store of gold". Janszoon struck New Guinea in latitude 5° S. and followed its irregular coast-line, rounding Prince Frederick Henry Island, to Torres Strait. Thence, steering south, he struck the east coast of the vast Gulf of Carpentaria and sailed as far as 13° 45′ S. Owing to the islands which filled the Strait,

[1] For the question of an earlier discovery the reader is referred to the admirable article *Was Australia Discovered in the Sixteenth Century?* by E. Heawood, *Geographical Journal*, Vol. XIV, No. 4, October 1899. I have also used his *History of Geographical Discovery in the Seventeenth and Eighteenth Centuries.*

the Dutch explorer, to whom the credit for the discovery of Australia is due, believed that the land he was coasting formed part of New Guinea. To quote from the report of the voyage: "They found this extensive country for the greatest part desert, but in some places inhabited by wild, cruel, black savages, by whom some of the crew were murdered . . . and by want of provisions and other necessaries, they were obliged to leave the discovery unfinished." The *Duifken* returned to Banda before June 15, 1606, and this important discovery was made about March of that year, or six months before the discovery of Torres. This was indeed an *annus mirabilis*.

To turn to a rival expedition, in 1605, nearly a century after the epoch-making voyage of Magellan, Quiros [1] sailed from Callao on a voyage of discovery. He shaped a W.S.W. course for some distance, passing to the north of Easter Island. He then, partly owing to the strong south-easterly gales, steered W.N.W. and discovered various islands. Information given by natives induced him to turn southwards, and on May day 1606 he reached the mountainous groups of the New Hebrides, as Cook later called them. Here, like Columbus at Cuba, he thought he had reached the mainland. In his case he believed it to be the *Terra Australis*. He took possession of his discovery for the King of Spain and named it Australia del Espiritu Santo.

Quiros then returned to America, and, proceeding to Spain, declared "that there are two large portions of the earth severed from this of Europe, Africa and Asia. The first is America, which Christopher Colon discovered; and the second and last of the world is that I have seen and solicit to people and completely discover."

Quiros was, however, mistaken, and the important discovery of Torres Strait was made by Diego de Prado, who was in command of the exploring vessel, whereas Luis Vaez Torres, whose name alone is remembered, apparently sailed under his orders.[2]

The explorers started on this venture at the end of June 1606, and approached Torres Strait by its eastern entrance. They sailed along the south coast of New Guinea, miraculously escaping its many lurking dangers in the shape of coral reefs and strong currents, until shoals compelled them to steer to the south-west. Large islands were noted, and possibly

[1] Vide *The Voyages of Pedro Fernandez de Quiros*, edited by Sir Clements Markham (Hakluyt Society), 2nd series, Vols. XIV and XV.

[2] *New Light on the Discovery of Australia*, by Henry Stevens (Hakluyt Society), 1930.

Cape York peninsula was sighted. The explorers sailed along the entire length of the southern coast of New Guinea, and traversing the island-studded sea, ended their important voyage, which had proved the insularity of New Guinea, at Manila in May 1607.

We next come to the important discoveries of Abel Tasman. His instructions, which proved that the existence of Torres Strait was unknown to the Dutch, were to explore the South Indian Ocean as far south as 54°, and to discover a short passage to Chile "to snatch rich booty from the Castilian".[1] Sailing from Batavia in 1642, he made for Mauritius, and thence shaped a southerly course, which upon reaching 40° he changed to south-east. On November 4, he discovered the island of Tasmania. Stormy weather made landing difficult, but the island was seen to be high-lying and covered with dense forests, while signs of natives were apparent, although none were actually seen.

Tasman, after surveying the east coast for some distance, resumed the voyage in an easterly direction, and on December 13 land was again sighted, really the west coast of the South Island of New Zealand, a second great discovery. Sailing northwards, Tasman surveyed the coast and reached a point at which "the land fell off so abruptly that we did not doubt this was the furthest extremity". Actually it was the northernmost point of the South Island, which Cook, in 1770, named Cape Farewell.

Tasman tried hard to find a strait, but tide and weather were against him, and after losing some men in a skirmish with the warlike Maoris, he sailed along the west coast of North Island. When he had rounded its northern cape, he considered that he had discovered the passage to Chile, and determined to sail back to Batavia. He again crossed the trackless ocean, aiming for the Solomon Islands but, keeping far to the east of a direct line, he discovered the Tonga and then the Fiji Islands. Finally the north coast of Guinea was struck, and Tasman ended his momentous voyage at Batavia.

Tasman stands high among the great explorers. He had sailed thousands of miles through the unknown ocean in latitudes never before reached in this area, and had discovered Tasmania and New Zealand. He had sailed round Australia, and thus proved that it had no connection with *Terra Australis*, but he believed that New Zealand formed part of it. To quote his views: "It (New Zealand) seems to be a very

[1] For this section I have consulted *The Discovery of Australia*, by G. A. Wood, 1922.

fine country, and we trust this is the mainland coast of the unknown south-land."

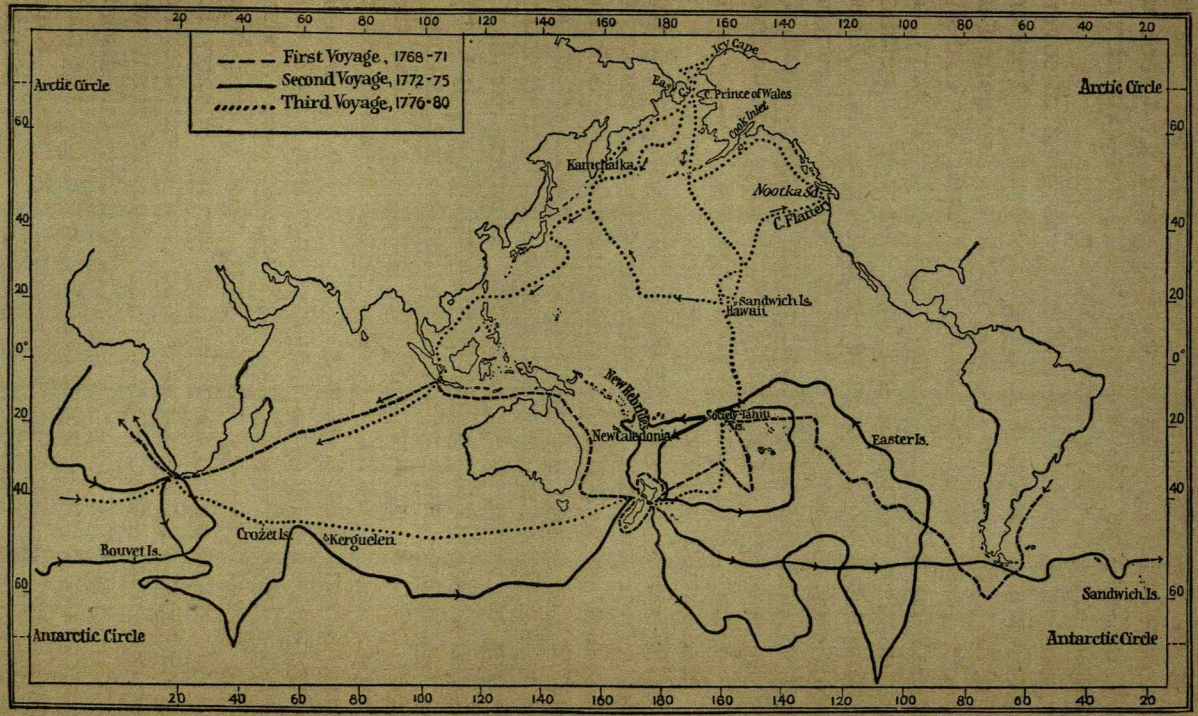
The treatment Tasman received may be guessed from the report of the Governor-General to the effect that "he had found no treasures or matter of great profit". Cabot was similarly treated, but the names of both these explorers are inscribed in letters of gold on the roll of fame.

We have now reached the epoch of the great discoveries made by Captain James Cook. The son of a Yorkshire labourer, he early took to the sea, where his promotion was rapid, and he was offered the position of Master of a coal ship. He decided, however, to volunteer for the Royal Navy, and in 1758 he sailed to Canada and took part in the operations which culminated in the capture of Louisberg and Quebec. He rapidly won distinction as a surveyor of the St. Lawrence, and later of the coasts of Labrador and Newfoundland, and in 1768 he was selected by the Royal Society to observe a transit of Venus. He was also commissioned to discover the elusive Southern Continent.

The *Endeavour*, a roomy bark of 368 tons, sailed from England in the summer of 1768, with Joseph Banks, the great botanist, as a member of the expedition. Cook took the route round Cape Horn, and sailed in latitude 38° through the area which the Southern Continent was believed to occupy. The transit of Venus was observed in cloudless weather at Tahiti, where the expedition remained from April to July 1769. Cook's instructions were to sail from the Society Islands, as he named the group, due south to latitude 40°, and there to ascertain the truth of the conjectured existence of the Southern Continent in that area.

Having proved the fallacy of the theorists, Cook sailed north into a better climate, and then west to New Zealand, which he struck half-way up the east coast of the North Island. He sailed into a bay which he termed Poverty Bay. Maoris appeared in canoes, but his attempt to capture them was resisted with great courage, and some of them were killed to save the lives of the crew. Cook at first sailed south, but later decided to return and survey the coast to the north. Rounding Cape Maria van Diemen and the Three Kings' Islands, he proved the truth of Tasman's claim that that navigator had discovered a sea-route to Chile.

Sailing down the west coast, Cook with British thoroughness charted its features until he reached "a very broad and deep bay which, on the southern side, seemed to form several



THE AGE OF COOK—II.

bays". Here he decided to careen the *Endeavour* among natives who were friendly. Tasman, who had entered this great bay from the same side, had suspected, but not discovered, the strait dividing the two islands, but the great English navigator, on February 7, 1770, in spite of the tide, "which roared like a mill-stream", sailed through Cook's Strait, and coasted North Island until he had completed his survey.

The east coast of South Island was charted with equal care, and on rounding it, "much to the regret of us continent-mongers", as Banks wrote, it was proved to be an island. Thus was dispelled the myth of a southern continent in this part of the Pacific Ocean. Coasting northwards along "a beautiful and fertile country" the survey of the coast of the two islands was completed.

Cook considered New Zealand to be suitable for colonization, and wrote: "So far as I have been able to judge of the genius of these people, it does not appear to me at all difficult for strangers to form a settlement; they seem to be too much divided among themselves to unite in opposition."

Cook had spent some six months in his valuable survey of New Zealand, and on April 1, 1770, he sailed west and struck Australia, or New Holland as it was then called, on April 19, at Point Hicks "because Mr. Hicks, first lieutenant, was the first who discovered it". This historical nomenclature has been unfortunately changed to Cape Everard. He followed up the surf-bound coast for some days, and then made the discovery of Botany Bay.

"On the 29th April at daylight", he writes, "we discovered a Bay which appeared to be tolerably well sheltered from all winds, into which I resolved to go with the ship." As the *Endeavour* sailed into the inlet, natives were seen on both headlands. The *Endeavour* anchored off the south shore, close to a hamlet of six or eight huts, where the inhabitants cooked their fish without taking any apparent notice of the ship. However "as soon as we approached the rocks, two of the men came down, each armed with a lance about ten feet long . . . resolved to dispute our landing to their utmost". Finally, after a fruitless parley, muskets, loaded with small shot, were fired and the two brave natives fled. The invaders went to the "houses" and distributed beads and ribbons to the children. In this dramatic manner the historical landing of Captain Cook in Australia was effected.

THE LANDING OF CAPTAIN COOK IN BOTANY BAY

(From the painting of E. Phillips Fox, by permission of the High Commissioner for Australia)

[*face p.* 176

Resuming the voyage, Cook passed but did not enter Port Jackson, which, eighteen years later, Commodore Phillip explored for three days and then selected Sydney Cove for the site of the first English settlement, owing to its possession of "the best spring of water" and good anchorage close to the shore.

On continuing the exploration of the coast, the land was noted as sandy—indeed worse than at Botany Bay. Cook sailed so close to the land that he knew nothing about the Great Barrier Reef, which approaches the coast in this part.

He sighted the first coral reef, and, although carefully feeling his way, the *Endeavour* was suddenly spiked. To quote Banks: "We were called up with the alarming news of the ship being fast upon a rock. . . . We were upon sunken coral rocks, the most dreadful of all on account of their sharp points and grinding quality." The situation appeared to be desperate, but after strenuous heaving, the *Endeavour* was floated and hauled into deep water. On beaching her, it was shown that the rock had broken off and plugged the ship.

While the repairs were being made "an animal as large as a greyhound, of a mouse colour, and very swift", was observed "which went only upon two legs, making vast bounds, just as the jerboa does". Thus the kangaroo, the representative animal of Australia, bounded on to the scene. Upon leaving Endeavour River, Cook was in constant danger. He risked sailing through the passage in the Barrier Reef, now called after him, but only to face outside the greater peril of being thrown back upon it by the violence of the trade wind. But he sailed back through it, and after weeks of anxious navigation, traversed Torres Strait, of whose existence he had heard. Accordingly he wrote: "I claim no other merit than the clearing up of a doubtful point." The dangers to the navigator of Torres Strait were very serious, and Cook was thankful when "a swell from the south-west left me no room to doubt that we had now an open sea to the westward".

Before quitting Australia, Cook named its north point Cape York, and, confident that the eastern coast had never been visited by any European, he took possession of it in the name of King George "by the name of New Wales".

From Australia Cook made for Timor in the Moluccas, where the Dutch possessed a strong fort. He then sailed along the south coast of Java and passed through the Straits

of Sunda to Batavia. Here the great navigator makes the important statement that either his determination of longitude was inaccurate or the Straits were wrongly shown in the published charts. Actually the error of three degrees of longitude was his, and this explains how utterly unreliable were the longitudes taken by his predecessors. Their latitudes, on the other hand, were fairly accurate from comparatively early days.

The *Endeavour* was repaired at Batavia, but the unhealthy climate levied a heavy toll in death and sickness. "The unwholesome air of Batavia", Cook wrote, "is the death of more Europeans than any other place upon the globe of the same extent." The *Endeavour* sailed from this death-trap in December 1770, and calling at Cape Town, the great voyage of exploration ended on July 13, 1771, when Cook anchored in the Downs. The wonderful collection of plants made by Banks added lustre to his splendid achievement.

Cook had proved that the Southern Continent did not exist where Ptolemy had placed it, and that New Zealand did not form part of it. In 1772, in command of two ships, he sailed to complete the proof that it did not exist at all. The instructions given to the great navigator were to proceed to the Cape of Good Hope and thence sail to seek for undiscovered lands in the great unknown area to the south. No land was sighted in this area, but the Antarctic Circle, situated in 66° 32′ S., was crossed for the first time in the history of mankind on January 17, 1773; and it was proved that the ocean covered the land that had been supposed to exist in this quarter of the globe. "The southern frigid zone foreseen by Aristotle," says Mill, "reasoned on by the Greek philosophers, who declared it existent but inaccessible, denied and stigmatized as heretical by the medieval Church, never hitherto deliberately sought for, had at last been entered by the *Resolution*, with only one iceberg in sight." [1]

After accomplishing this feat, Cook decided to make for New Zealand, from whose islands both ships cruised eastwards nearly half-way across the Pacific, disproving the existence of the *Terra Incognita* in that vast area. After a visit to Tahiti for refreshment, Cook again returned to New Zealand. Yet again, sailing without his consort, on January 30, 1774, Cook reached his southern limit at 71° 10′ S.

"At four o'clock in the morning", he writes, "we perceived the clouds, on the horizon to the south, to be of an unusual brightness,

[1] *The Siege of the South Pole*, by H. R. Mill, 1905, p. 71.

which we knew announced our approach to field ice. Soon after it was seen from the topmasthead, and at eight o'clock we were close to its edge. It extended east and west far beyond the reach of our sight. Ninety-seven ice hills were distinctly seen within the field, besides those outside—many of them very large, and looking like a ridge of mountains rising one above another till they were lost in the clouds. . . . Since, therefore, we could not proceed one inch farther to the south, no other reason need be assigned for my tacking and standing back to the north."

Cook broke down with a " bilious colic " after this trying experience on a diet of over-salted meat and rotten ship's biscuits, and made for Easter Island, where the statues and terraces delighted the explorers.

After again spending a month at Tahiti, the refreshed navigators visited Australia del Espritu Santo, and reduced the discovery of Quiros to a small, unhealthy archipelago. When the *Resolution* shaped a course for home, the existence of a vast temperate continent in the Pacific had been completely exploded, but Cook had expressed his belief in the existence of an Antarctic Continent.

Calling at the Cape of Good Hope, Cook anchored at Spithead on July 30, 1775, thus concluding another voyage of discovery, the greatest since that of Magellan.

The last voyage of Cook had for its main objective the discovery of a passage from the Pacific into the Atlantic. At the same time he was instructed to annex lands not already discovered by other powers. The *Resolution* and *Adventure* sailed from Plymouth in July 1776 and examined Kerguelen, recently discovered by the French. Cook reached New Zealand in February 1777, and then, sailing north, rediscovered the Sandwich Islands. Striking the coast of North America, the great navigator sailed steadily northwards, and, after overhauling his ships at Nootka Sound on the west coast of Vancouver Island, he examined the coast of Alaska in the vain search for a strait leading into Hudson Bay. Coasting northwards he named the most western cape of the American continent Prince of Wales Cape. He then sailed across to the coast of Asia, where he landed to study the natives and named the most easterly point of that vast continent East Cape. Returning to the American continent, the great explorer sailed north-east along the American coast. On reaching latitude 70° 29′ N. and longitude 161° 42′ W., his way was blocked by ice, and he gave the appropriate name of Icy Cape to his " Farthest North ".

Cook paid much attention to soundings, and discovered

that the sea at Bering Sea was shallow, and exercised no influence on the currents, as might have been supposed.

Returning to the continent of Asia once again, he coasted along it for some days to latitude 65° 56′ N. and longitude 179° 11′ W., where he named the nearest promontory Cape North.

Sailing towards the Pacific Ocean, Cook named a bay on the American coast Norton Sound. Landing a party, he collected spruce for making beer, and berries, while two Russians were discovered, who furnished valuable information. For half a century Cook's Icy Cape marked the bound beyond which no navigator sailed.

Sailing southwards for the last time, Cook discovered Hawaii. There pilfering by the natives led to a fight, in which the explorer was killed.

Thus died Captain James Cook, the greatest explorer of his age and the greatest of British navigators, who had accomplished a task worthy of his genius in solving the problem of the Pacific. The inscription on the base of his statue in London runs :

> " Circumnavigator of the Globe—Explorer of the Pacific Ocean—He laid the foundations of the British Empire in Australia and New Zealand—He charted the shores of Newfoundland and traversed the Ocean Gates of Canada both East and West."

CHAPTER XXI

THE PENETRATION OF AMERICA DURING THE SEVENTEENTH AND EIGHTEENTH CENTURIES

> "Alexander Mackenzie, from Canada, by land, the twenty-second of July, one thousand seven hundred and ninety-three."
>
> *The Inscription of Alexander Mackenzie on the Pacific Coast.*

FRANCE played an insignificant part in the struggle for the trade of India and the Spice Islands at the beginning of the seventeenth century, but French explorers, continuing the important discoveries of Cartier, took the lead in the exploration of North America.[1]

Chief among them was Samuel de Champlain, who had travelled to the West Indies and Mexico before he made a preliminary voyage up the St. Lawrence in 1603. He returned in 1608, and founded Quebec, and later Montreal. In the spring of 1609 he joined an Indian war-party of Hurons, and travelling southwards up the Richelieu River, discovered the lake which is called after him. In 1613 he continued his voyages, and explored the Ottawa, the chief northern tributary of the St. Lawrence.

In 1615 Champlain made his most important journey. Following up the course of the Ottawa and its tributary the Mattawa, he crossed the divide to Lake Nipissing, and reached the wide Georgian Bay in Lake Huron. He then made for Lake Ontario, and accompanied the Hurons in an attack on the stronghold of the Iroquois, situated to the south near Lake Oneida. This expedition, in which Champlain was wounded, was unsuccessful, and the great Frenchman returned to Quebec where, though he made no further discoveries himself, he encouraged others to follow up the trails he had blazed.

Montreal and Quebec were captured by an English squadron in 1628, but, upon the declaration of peace, Canada was restored to France in 1632, and the Jesuits were placed in sole religious

[1] Cf. *The History of Geographical Discovery in the Seventeenth and Eighteenth Centuries*, by E. Heawood; *A History of Geographical Discovery and Exploration*, by J. N. L. Baker; *The Life of Champlain*, by R. Flenley, 1924.

charge of both settlers and Indians. They acquitted themselves nobly of this onerous task, which, as one of the Fathers wrote, was a long and slow martyrdom.[1]

Among the chief successors of Champlain was Jean Nicollet, who in 1634 was commissioned by him to find a passage to the South Sea. Nicollet, from Lake Huron, reached Lake Michigan. He then followed up the Fox River to the portage, crossing to the Wisconsin, and reached the watershed separating the St. Lawrence from the Mississippi, which latter river was called "The Great Water" by the Indians. Misled by the information he had acquired, Nicollet reported that the Pacific was not far distant, and that he had discovered a new route to China.

The greatest of the later explorers of this important period was La Salle, who in more than one expedition navigated Lake Ontario and reached the Niagara Falls.

In 1672 Joliet and Marquette—the latter of whom had been in charge of a mission at the entrance to Lake Michigan—started on a voyage of exploration to discover the Mississippi. The explorers ascended the Fox, and, crossing the watershed, launched their canoes on the Wisconsin, down which they navigated to the mighty Mississippi. Floating down its broad stream, they reached the great prairies with their herds of buffalo, and terminated their important voyage at the junction of the Arkansas River, having proved that the Mississippi must reach the Gulf of Mexico, and not the Pacific. They also met Indians who had guns, hatchets, hoes, knives, etc., purchased from European traders.

This discovery was followed up by La Salle, who in 1681 navigated the Mississippi, being generally welcomed by the Indians. Upon reaching the delta, the explorers separated and descended the three main channels. On the shores of the Gulf of Mexico La Salle took formal possession of the valley of the Mississippi for France under the name of Louisiana. La Salle thus solved the problem of the great river, whose waters had been noted by De Narvaez a century and a half earlier. This feat ended a wonderful period of discovery in which French officials, monks and trappers had, in the face of great difficulties, explored the interior of North America with its remarkable group of great lakes.

We now come to the appearance of the English in the area that subsequently became the United States of America. The English in North America drove out and almost exterminated

[1] Cf. *The Jesuit Relations*, 1610–1791, ed. by Edna Kenton.

THE FALLS OF NIAGARA
(*From Hennipin's New Discovery*)

[*face p.* 182

the warlike Indians, who delayed their advance into the interior for many years. They intermarried with them but little, whereas the Spaniards, generally speaking, settled as an aristocracy among vast populations of submissive Indians with whom they intermarried freely. The English, moreover, usually settled in a climate suitable for a northern race to lead a life similar to that of Europe, whereas the Spaniards relied almost entirely on slave labour in tropical or semi-tropical climates.

The attempts of Sir Walter Raleigh to found the colony of Virginia in 1585 and 1587 had failed, but in 1607 a permanent settlement was made by the London Company at Jamestown on the banks of the muddy James River. Among the leading pioneers was James Smith, who, penetrating into the interior, was taken prisoner by Indians and was only saved by the influence of the Chief's daughter, Pocahontas, who became such a romantic figure to later generations.

In 1614 Smith examined the shores between Cape Cod and Penobscot Bay, and published a map of the country to which he first gave the name of New England. In 1620 the Pilgrim Fathers reached the coast of Massachusetts and founded the colony of New Plymouth. Twelve years later Lord Baltimore founded a settlement on the shores of the Potomac in the country north of Virginia, which he named Maryland.

Indeed, from New Brunswick on the north to Florida in the south, English colonies were founded. From these colonies explorers penetrated short distances into the interior, but it took them more than a century to cross the Alleghanies. Once that barrier was conquered, the continent was crossed to the Pacific in eighty years. As a result of this slow advance, the French, who were already established in the interior of Canada, completely shut in the English and Dutch colonies, whose energies at that period were almost entirely devoted to establishing themselves. In 1645, after suffering from an Indian outbreak, forts were built to guard the settlers, which, like Richmond, became towns, but for more than a century little was undertaken in the way of serious exploration. In 1769 Daniel Boone of North Carolina led a party across the mountains to the beautiful blue-grass valley of Kentucky, swarming with buffaloes and other game, which was gradually occupied, albeit not without setbacks owing to the hostility of the Indians.

The Dutch had appeared on the scene early in the seventeenth century. In 1609 Henry Hudson, of Arctic fame, in

the service of the Dutch East India Company, sailed up the river called by his name, ascending it for 150 miles and entering into relations with the Mohawk Indians on its banks. In 1614 the Dutch constructed a fort on Manhattan Island, and in 1622 founded New Amsterdam, which subsequently became New York. They also founded towns on the banks of the Hudson and Delaware Rivers. The English realized the danger involved in the separation of their colonies into two areas and, in 1664, they occupied New Amsterdam and changed its name to New York.

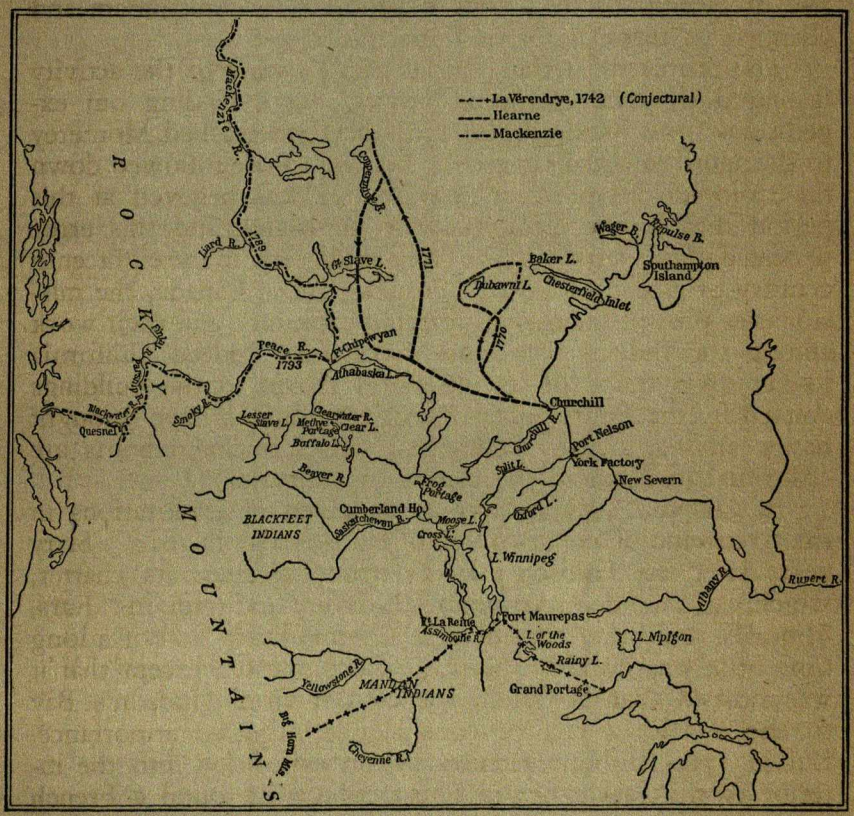
The Spaniards at this period, partly owing to the activity displayed by rival European powers, were sending out expeditions from Mexico. By 1565 they had reached Monterey to the south of San Francisco. In 1604 Onate followed down the Colorado River to its mouth. It was believed at this period that Lower California was an island, and this error persisted until a survey of the coast made early in the eighteenth century proved it to be a peninsula. As in Canada, the missionaries proved themselves intrepid explorers, and their work among the Indians was most successful. Indeed California to-day owes much of its old-world charm to the buildings erected by the Friars, albeit recent earthquakes have wrought havoc among them; while their self-sacrificing labours are enshrined in *Ramona*, the classic of California.

In Chapter XVI an account is given of explorations in the Arctic and of the discovery of Hudson Bay in 1610. Sixty years later the Hudson Bay Company received its charter, which was intended to promote discovery and trade in "Furs, Minerals, and other considerable Commodities". For a long time little was done in the way of exploration, except that it was proved that no strait opened out from Hudson's Bay to the Pacific, a fact of considerable negative importance. But in 1754 Anthony Hendry led an expedition into the interior to the Saskatchewan River, where he found a French fort. However, he was permitted to continue his journey into North Saskatchewan, where he met the Blackfoot Indians. Crossing the Red Deer River, he spent the winter in the vicinity of 114° W., exploring the country in various directions in the modern state of Alberta.

Of far greater importance was the journey of Samuel Hearne, who set out in 1769 to find an exit from Hudson Bay on the west, and to examine the country for copper-mines that the Indians had reported. Failing not once but twice, this determined Englishman in December 1770 reached

the Coppermine River which he followed to its mouth. On his return journey he discovered the Great Slave Lake. Incidentally, the negative results of this great journey were most valuable, as proving that there was no possibility of finding the North-West Passage through Hudson Bay.

The greatest British explorer of these northern lands was the fur-trader, Alexander Mackenzie,[1] who in 1789 determined to discover whether the waters of the Great Slave Lake reached



NORTH AMERICA—WEST AND NORTH-WEST, 1668–1800.

the Arctic or the Pacific Ocean. His starting-point was Fort Chipewyan, situated on Lake Athabasca, which had been founded in the previous year. From this base a strong party, which included several Canadians and Indians, entered the Slave River, and effecting portages where necessary, reached the Great Slave Lake. Ice made the crossing very difficult, but the outlet from the lake was found, and Mackenzie River,

[1] Vide *Voyages*, by Alexander Mackenzie, 1801.

as it was rightly named, was followed in a north-westerly direction. Supplies ran very low, but Mackenzie induced his companions to persevere, and on July 12 the expedition reached the Arctic Ocean, after following the river for 1,000 miles.

A second and still more important journey was made in 1792. Starting again from Fort Chipewyan, Mackenzie pushed south-west up the Peace River and constructed a fort, in which he spent the winter. In May 1793, continuing his voyage up the Peace River, he crossed the Rocky Mountains, making a portage through the bush on the mountain-side to avoid the deep canyon, which cuts through the main divide.

He writes:

> "At the break of day we entered on the extraordinary journey, which was to occupy the remaining part of it. The men began, without delay, to cut a road up the mountain, and as the trees were of but small growth, I ordered them to fell those which they found convenient, in such a manner that they might fall parallel with the road. The baggage was now brought from the waterside to our encampment. This was likewise from the steep shelving of the rocks, a very perilous undertaking, as one false step would have instantly been followed by falling headlong into the water. When this important object was attained, the whole party proceeded with no small degree of apprehension to fetch the canoe; and, as soon as we had recovered from our fatigue, we advanced with it up the mountain."

Thanks to his guides, he followed the west-north-west branch at a point where the river forked, and reached the Fraser River, down which he floated for some distance. Indians, however, warned him of difficulties in navigation in its lower reaches. Mackenzie consequently left the Fraser River, and, crossing a divide, reached a tribe of friendly Indians dwelling on the Bella Coola River. Using their canoes, the river was followed to its mouth, and Mackenzie reached the Pacific Ocean.

He found a bay some two miles wide, and, paddling along the shore in stormy weather, landed in a small cove, but could not take observations owing to the continuously cloudy sky. On the following day he continued his voyage and landed at the Cape which Vancouver had recently visited and named Cape Menzies. He was now faced with hostility owing to the Indians having been fired at by Vancouver's men, but taking up a strong natural position on a commanding rock, he waited until he had completed his observations, and then, mixing some vermilion, he painted the inscription quoted at the beginning of this chapter, and started on the return journey.

Mackenzie was the first European to cross the continent