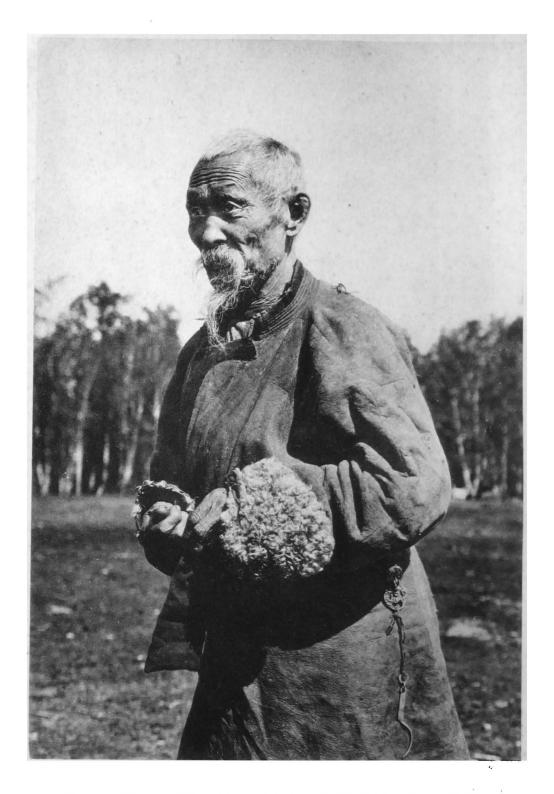
UNKNOWN MONGOLIA



AN URIANKHAI OF THE UPPER YENISEI BASIN.

UNKNOWN MONGOLIA

A Record of Travel and Exploration in North-West Mongolia and Dzungaria

BY

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GOLD MEDALLIST OF THE ROYAL GEOGRAPHICAL SOCIETY

WITH THREE CHAPTERS ON SPORT

BY

J. H. MILLER, F.Z.S.

AND A FOREWORD BY
THE RIGHT HON. EARL CURZON OF KEDLESTON
K.G., G.C.S.I., Etc.

WITH 168 ILLUSTRATIONS, PANORAMAS
AND DIAGRAMS, AND 6 MAPS

VOL. I.

LONDON HUTCHINSON & CO.

PATERNOSTER ROW

1913

FOREWORD

THE writer of this book, turning aside from the more familiar pathways of recent travel and reverting to the taste of an earlier generation, has selected a little-known portion of Central Asia as the scene of the explorations herein described. If a point be taken on or about the 45th parallel of latitude midway between the Caspian and the Sea of Japan, we shall approximately strike the region which he traversed, surveyed, and mapped, with the patience and thoroughness of the true geographer, during the years 1910 and 1911.

The regions in question are bounded by the Siberian dominions of Russia on the north; they include the little-known basin of the Upper Yenisei River, which our author explored and describes with genuine enthusiasm; they embrace successively the habitat of the Western Mongolian tribes and the plains of Dzungaria, and they are closed on the south by the long palisade of Tian Shan or Celestial Mountains. On the east they are shut off from the world and from the rest of China by the vast blank of the Gobi desert; on the west are the settled conquests of Russian Turkestan.

The great interest of the regions thus bordered lies in the fact that they constitute the Marches between rival races, creeds, and political powers. Here we see

the Russian colonist, eager and competitive, pushing forward from Siberia into a land rich with minerals, fish, and furs, and serenely conscious that the future is his. We see the Mongolian tribesmen, heirs of a mighty past, long withered under the blighting influence of degenerate Lamaism, but now turning to the risen Sun of Russia to find a warmth and a protection which Chinese suzerainty has failed to give them. We see, on the plains of Dzungaria, the easternmost outposts of Islam, Turki tribes that still turn towards Mecca, and present a romantic and virile picture, not unlike that which in many a tract of Central Asia must have greeted the eyes of Marco Polo. see China, at once, in movement and in decay, exhibiting in the provinces, known as the New Dominion, signs of considerable vigour and activity, elsewhere atrophied and effete. The question which Mr. Carruthers continuously poses and indeed lies in the background of all his investigation and reflections is: with whom does the future of these mysterious regions rest, which have played so great a part in the history of the world, and which seem once more destined to have a future? To those who read between the lines of this book, there will occur but one answer.

Our traveller is of the type of geographer which has been evolved by prolonged experience and research. He does not set forth in the spirit of dare-devil and unscientific adventure, with few resources but his own courage, to face unknown risks, and to survive incredible dangers—which was characteristic of the Central Asian explorer of the first half of the last century. Thoroughly familiar with the writings of all his European predecessors (and they have been but few) in the regions which he

proposes to visit, a trained surveyor, accompanied by competent companions, equipped with the means of investigating and collecting the flora and fauna, the geology and zoology of the country, and marching at leisure with a carefully organized caravan, he sets before himself the ambition of making a definite and valuable contribution to the sum-total of human knowledge, and of writing a book that will long remain a classic on its subject. How well he has succeeded may be shown by the fact that in 1912 he received for these journeys and his account of them the Gold Medal of the Royal Geographical Society.

Those who depict Central Asia to themselves as a land of limitless desert, ribbed by occasional and mighty ranges, and characterized by general desolation, will perhaps be surprised, as they follow the writer, even within the compass of the explorations which he here records; at one time into a country of jungle and swamps, infested by insects, at others into primeval forests, again on to bowery meadows and grassy uplands, or again amid crags and glaciers and moraines. Sometimes he is floating in rafts or boats on the broad lakes, or paddling a canoe on clear rivers; he rides alternately the camel, pony, and ass, or is bumped about in a Chinese cart or a Russian tarantass; now we see him sleeping in grim and dirty caravanserais—the skeletons of an almost immemorial past; again he is the guest of nomad khans, hunting with golden eagles and falcons, and living in richly-embroidered huts of felt.

In the course of these varied experiences hardships are encountered, disappointments occur, and an inexhaustible patience is required. But our author is of the true fibre of the Asiatic traveller, and it may safely be wagered that this book describes the two happiest years of his life.

While these volumes present the broad picture and subserve the general purpose to which I have referred, there are chapters in them which merit special attention. Such, are the careful and scholarly account of the indigenous tribe of the Uriankhai, living in seclusion on the Siberian frontier with their herds of domesticated reindeer, which they drive and ride, and milk and occasionally eat; the chapter on the Mongols, which condenses in a succinct and picturesque form the history of that extraordinary people, who once planted sovereigns on the throne of Pekin, overran and nearly conquered Europe, created an amazing but ephemeral empire that stretched from France to Cathay, bequeathed to India the Mongol dynasty which has left so deep a mark on its architecture and history, and threw up the portentous figure of Jenghis Khan, who was probably responsible for more bloodshed than any human being that has ever lived, and is still appropriately revered as a deity among the Mongolian tribes; the very different picture of the Kirei Kirghiz, who also produced a medieval hero in the person of the semi-historical, semi-mythical Prester John, and who, while owning allegiance partly to Russia and partly to Pekin, still pay spiritual homage to Stamboul; the account of the little independent Mohammedan Khanate of Hami or Kumul on the western confines of the Gobi desert; and the description of an interesting tour of exploration in the Karlik Tagh. It may be be added that Mr. Carruthers is the master of a very clear, agreeable, and scholarly style. His name is a worthy addition to the sparse list of English explorers in these parts of Central Asia that contains the names of

Younghusband, Ney Elias, and Stein, and even in the company of the illustrious Russians,—Prjevalsky, Kozloff, Potanin, Severtzoff, and others, whose pioneer labours, spread over a long term of years, have conferred such incomparable advantages upon their own country,—it will be held deserving of honour.

Olyn Medlerlan

PREFACE

THE purpose of these volumes is to place on record an account of certain regions of Upper Asia, hitherto left undescribed. The narrative of the journey is interwoven with an account of geographical exploration, with a broad outline of the history, and with a description of the races and the physical features of the land as a whole. The scope of the work is set forth at length in the Introduction.

The difficulty of combining scientific observations, and a descriptive account of a particular region, with the story of our own experiences has led to the elimination of technicalities, except where absolutely necessary; the scientific results of the expedition being published separately in journals especially devoted to such subjects.

It should be noted that this expedition was entirely a private undertaking, an original idea, carried out by individual effort. My own special thanks, and the thanks of all geographers, are due in the first place to my companions—Mr. J. H. Miller and Mr. M. P. Price, who liberally subscribed to the funds necessary for the carrying out of such an enterprise, and on whose neverfailing energy and keenness the success of the expedition largely depended. My account of the expedition and its work has been supplemented by three chapters written by Miller, on the big-game hunting and the sport of the regions we visited; while Price has published his impressions of the political and social conditions of the Siberian borderlands in a separate volume.¹

To the Royal Geographical Society I owe a debt of gratitude for the support they gave me, in forming the

^{1 &}quot;Siberia," M. P. Price. Methuen, 1912.

initial plans of the expedition, and for the loan of scientific instruments. I must also acknowledge the never-failing courtesy and here given me by the Librarian and his assistants, during research work which extended over many months; as well as the care taken by the cartographers during their preparation of the maps.

I have thank Lord Curzon for his appreciation of my work, as shown in the Foreword, which he has written to introduce these volumes.

The illustrations are, with two exceptions, all from our own photographs, the authorship of those not taken by myself being acknowledged in the list. I have to thank Mr. J. D. Cobbold for the loan of the photograph reproduced opposite page 60, and Mr. T. P. Miller for that opposite page 334. To Mr. J. G. Millais we are indebted for the original picture of the wild sheep—Ovis ammon, which he was kind enough to paint in spite of the pressure entailed by his own work. The three coloured maps have been reproduced by kind permission of the Royal Geographical Society, under whose auspices they were compiled from my original surveys; they have already appeared in the Geographical Journals of June 1912 and April 1913.

I have also to acknowledge the great help in matters of antiquarian interest afforded me by M. Adrianoff of Tomsk University. To Capt. Ernest Rason I am grateful for help in connection with the translation of several Russian works. For many valuable literary suggestions and the reading over of the entire proofs I must thank Lady Owen-Mackenzie, and Mrs. Holden, whose respective advice in matters of arrangement and composition I find it difficult to sufficiently acknowledge.

D. CARRUTHERS.

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UNKNOWN MONGOLIA

INTRODUCTION

FORMER experience in Central Asia, and a careful review of the labours of all previous travellers in the remote parts of this great continent, showed us that there was, at least, one region still worthy of examination.

In the exploration of the sources of the Yenisei River, of North-western Mongolia and Dzungaria, we have found a practically new field for original work in the study of geography, ethnology, and zoology.

This great tract of country, stretching across the heart of Asia, is one of those few regions in the exploration of which the British have had no part, it having been entirely monopolized by the Russians. For this reason, and since the labours of these Russian travellers are frequently left unrecorded, and, even when published, are unintelligible to investigators and scientists in other parts of the world—unless they chance to be well acquainted with the Russian language, it is our ambition to place on record a detailed description of these lands, which in many respects are quite unknown to English readers.

In these days the public expects something altogether new, some actual addition to knowledge, in a book of travel, and yet every year it becomes a harder task for

the would-be explorer to find scope for his energy, the blank spaces on the maps being rapidly filled in, and pioneer work having almost become a thing of the past. We claim, however, that the countries we visited, namely, the Upper Yenisei basin, North-western Mongolia; and parts of Dzungaria, have been left almost untouched by previous travellers, and that our information is practically original. No apology, therefore, is needed for the writing of this book; it is, in no sense, an addition to the bibliography of a much-travelled-over land. The birthplace of one of Asia's greatest rivers, the region of the sources of the Yenisei, has hitherto escaped the discerning eye and eager foot of the traveller. The existing maps of this country are much at fault, certain regions have never even been mapped, and no attempt has been made to describe the wild stretches of dense forest and rugged ranges on the Siberian-Mongol frontier. or the strange tribes of shy, forest-dwelling Uriankhai inhabiting them.

Our aim was, primarily, to explore as thoroughly as possible the little-known sources of the Yenisei River, the upper waters of which, rise on the northern edge of the great Mongolian plateau. Here, in a mountain-girt basin, cut off alike from the plains of Siberia and the bleak uplands of Mongolia, protected from intrusion by a belt of the densest forest, and by the rugged heights of its border ranges, lies a region containing material of deep interest both to the geographer and to the naturalist. Here exists the last stronghold of the indigenous tribes of Southern Siberia—tribes that have been driven back into the far recesses of the forests, the Upper Yenisei basin being the resort of the Urian-

khai—"the wild forest-dwellers"—who at the present day just hold their own against nature.

After penetrating into this region in the summer of 1910, and traversing the basin from the far north-east to the south-west, we passed out of it by crossing the Tannu-ola range—the watershed between Arctic drainage and the inland self-contained basins—and entered Mongolia. Through North-western Mongolia we continued our work, visiting that remarkable group of mountains—the Turgun or Kundelun—the headquarters of the Durbet tribe, and gaining an insight into the present-day conditions of the once-powerful Mongols.

A few Russian travellers had alone preceded us to the sources of the Yenisei, but travellers on the wide Mongolian plateau itself are more numerous. Atkinson, Ney Elias, and Younghusband represent the only British travellers; the Russians, however, form a considerable band of explorers amongst whom are the illustrious names of Prjevalsky, Kozloff, Potanin, Pievtzof, and Matussovski. We hope to add considerably to the information they have given us of the mountains, lakes, and pasturages, and of the wandering nomads of these wind-swept wastes. Our itinerary did not follow the same line as that of previous travellers, since a careful consideration of all their routes enabled us to steer a new course across the highlands of Mongolia.

Our route, then, led us in a westerly direction to the home of the Kirei—a nomad tribe of great importance, who, as the descendants of the people once under the direct chieftainship of that historical person, Prester John, present problems of considerable interest.

Dzungaria, a vague term used to include the whole

of the inter-Altai-Tian Shan region, also lacks any systematic or detailed description, and this occupied our attention after crossing Northern Mongolia. The information we gained during ten months spent on its border ranges and in crossing its inhospitable wastes, combined with the observations on the previous journeys of the great Russian pioneers, brings up to date the account of the ancient land of the Dzungars. We followed the Russian-Chinese frontier from the Altai to Kulja in the Ili Valley, at which point Price left us for further journeys in Russian Turkestan and the Caucasus, on his way to England, and Miller and I halted for several months. Beyond this, our plans at the outset were vaguely formed; the main idea being to turn eastwards, along the southern borders of Dzungaria to Urumchi and Kumul, thence to cross the Great Gobi to the Hoang Ho and so on to Pekin. The latter part of this programme was, however, given up, in order to track more thoroughly over Dzungaria. After carrying out a detailed survey of the Karlik Tagh group, to the north-east of Kumul, we turned back and again crossed Dzungaria. We included in our itinerary the Bogdo-ola sacred lake on the south, the Barlik Mountains on the north, the Borotala Valley on the west, and arrived again in Kulja in July of 1911; we then crossed the Tian Shan into Chinese Turkestan, and returned to England via Kashgar, Yarkand, and the Karakorum range, which led us to Leh, Kashmir, and Bombay.

The work was only accomplished with infinite trouble and patience. It was impossible to hurry across such a country. Slow plodding behind a crawling camel caravan across endless steppes, short stages in Chinese carts on still shorter winter days along the Chinese Imperial High Road, or five miles a day through dense forest on the Siberian frontier, prove that the journey was a laborious one, and that it was quickly accomplished in twenty months. Extremes of climate in Central Asia added to the difficulties of arranging an itinerary, for the winter months prohibited geographical work, and put collecting out of the question.

This narrative should be a counterpart of the regions we passed through,-varied in the Yenisei forests, monotonous in Mongolia and Dzungaria. The "feel and the smell" of the country should live in all we describe, whether it is sombre forest, misty plateau, racing river, or burning desert. It is the atmosphere of the country, the heart-throb of that great lone land, of which we wish to give an impression, not omitting, at the same time, exigencies of daily travel, the toils of survey work, or the joys of discovery. This is an account of a journey across 5,000 miles of Asia, between the railways of Siberia and India, accomplished by means of tarantass, canoe, boat, and raft, by ass, ox, camel, and pack-pony, through countries the mere mention of which must arouse a glow of enthusiasm in the most confirmed city-dwellers; a journey that led us through the ancient land of the Mongols, across the little-known deserts of Dzungaria, through sandy Turkestan-with its old-world, sleepy oases, and over the high-flung Himalayas.

Mongolia and Dzungaria are, to the average European, lands of romance and mystery. Lying off the track, midway between Siberia and Cathay, they do not possess the features of either of these wide lands, but form the most eastern portion of that great zone of waste-land

which lies like a belt across the Old World, under the names of Turkestan and Transcaspia, Persia, Arabia, and the Sahara. The great trade-routes of Asia pass by Mongolia and Dzungaria without tapping them. The commerce and transport of the ancient world, which once connected east and west, passed far to the south, whilst the new line of communication passes across Siberia to the north; Mongolia and Dzungaria, lying isolated between the two, have remained untouched. The energetic exploiters of China's secrets have scarcely extended their labours farther than the boundaries of the Great Wall; the explorers of Chinese Turkestan have stopped short on reaching the bleak wastes of Mongolia, the Tian Shan Mountains being the most northern limit of their journeys. The true pioneers of travel in these regions have come from the north: the hardy colonists of Siberia, the scientists from her universities, and the soldiers from her garrisons, having supplied the units of the most daring and plodding band of adventurers into the Unknown, that ever honoured the annals of exploration.

With this intrusion of Europe into Asia came the best of the Russians, adventurers at heart and dauntless in spirit, eager to add to their area of Empire, to open up fresh spheres of trade, and to enrich their scientific collections. Came also the foremost of her soldiers, merchants, and scientists; Kozloff and Prjevalsky—the explorers, Severtzoff—the naturalist, Radloff and Adrianoff—the antiquarians, all having won their laurels on these lonely Asiatic frontiers. What yearnings for the "new" must they not have felt, when they saw the whole of Asia unroll before the foremost lines of their dusty columns! Little wonder that men grew ambitious

when a whole continent lay spread out before them. Russia has overflowed into Siberia, and Siberia has absorbed every man she sent. China has, strangely enough, expanded into foreign lands,—into America and Australia, rather than tackle the problem of systematically colonizing her outlying provinces. For this reason these lands lie untilled and desolate, given over to the herds of wild-horses, to the shy, wild mountain-sheep, and to the roaming bands of nomads.

The call of Mongolia has remained almost unheeded throughout the ages. Men still look on that region as the birthplace of that greatest scourge the world ever experienced, the Mongol demi-god, Jenghis Khan. a wild land, a land of immense distance; one can travel continuously for a week, and still hold the same snowy peaks in view. The scenery is savage and the climate inhospitable, yet, in spite of the severity of winter, summer fills the land with song and flushes its plateaux with grass. Our Mongolia, of the Siberian frontier, is one which will surprise geographers, and tempt the would-be traveller to wander in wild but charming surroundings. Here, on the edge of China,—on the verge, as it were, of the Gobi Desert,—is a land of exceptional beauty; here are mountains, forests, lakes, and rivers, meadows of lush, long grass, a wealth of wild flowers, deep, shadowy forests of larch and pine, and racing streams of clearest water-in truth, a New Mongolia.

In this land of unique physical conditions is to be found the birthplace of many races now widely dispersed; the origin of so many breeds can be traced in this quarter of Asia, that men have lightly called it "the cradle of the human race." From these steppes and plateaux, in

days gone by, emerged various migrating tribes and many world-wide movements had here their beginning, making the history of its inhabitants most difficult to follow. Here lies the ancient home of some of the greatest Asiatic races,—the Mongol and the Turk, the descendants of whom have ruled in Pekin and Stamboul. Such widely separated peoples as the Finns of Northern Europe, the Magyars of Hungary, and the Red Indians of America, not to mention the Samoyedes and the Eskimos, must be credited with having originated in these regions.

This strange land, which to-day is of little account, has profoundly influenced the history of the world. Here, countless ages ago, arose that Uigur Empire, the origin of which is shrouded in mystery and antiquity, its history extending so far into the dim distance that the most learned scholars have failed to unravel its problems. This is the land which has bred unrest from time immemorial; on these wind-swept plateaux wandered the Huns who eventually overran Europe; this was the home of the wild nomads who afterwards founded a dynasty in China, -which lasted until quite recently, who created an Empire in India, and who, by virtue of immense conquests in Asia, were actually in a position, for a time, to speak in dominating accents to Europe; here, too, was born that Mongol chieftain Jenghis Khan, whose name is still honoured by the Tartar tribesman, and whose personality has ever been invested with supernatural powers.

It is of special interest to study the great men-movements in these vast regions of Inner Asia,—on the marches of Siberia and China, to trace the manner in which aimless migration and stupendous military expeditions led to more systematic conquests by greater powers; and to note that the whole of that immense tract fell finally under the rule of two great peoples. An unusual combination of physical conditions adds further interest to this study of the Russo-Chinese border-lands. The opening up of Siberia is in itself a wonderful story; Siberia is the Canada of Asia, and its colonization has a great future. Mongolia, on the other hand, is a country with a past, capable of development, but presenting the serious drawback of being inhabited by an ancient and not very virile race. Dzungaria comes under the category of those lands which may be turned to good account, under favourable political conditions and a progressive and consecutive Government. Chinese Turkestan, on the other hand, is a paradox; it is the most fertile of all the lands here mentioned, and every available acre is taken up, the population is greater than the country can support, and it produces an inert, lethargic race, who, having enough, are content.

On to these lands are pressing the surplus population—the front ranks—of two peoples with a future; on the north and west are the Russians, and on the south and east are the Chinese. Who would dare to prophesy the future of the marches of Siberia and China?

If, as some think, it is "in Asia once again that will be decided the destinies of the world," then every portion of Asia claims notice, but more especially those parts where the Asia of the Asiatics borders upon the Asia under European rule—where the East and the West come face to face, and where doubt exists as to their respective futures. Since our return from Mongolia, that land, which yesterday was almost unknown, has, by a

curious coincidence, leapt suddenly into prominence. The land of the Mongols has again appeared upon the world's stage, after having been for eight hundred years behind the scenes. China has been in the throes of revolution, Mongolia has seized the opportunity to throw off the Manchu yoke, and over a million square miles of Asia have come on the market. The importance of this cannot be overrated, for Mongolia is China's landward gate,—through Mongolia and Dzungaria run the roads from Cathay to Siberia and Western Asia. Between the Far East and the West the only line of communication, uninterrupted by natural difficulties, runs through Dzungaria. Some day, no doubt, the whistle of the locomotive will startle the wild-asses of the Dzungarian plains, and the slouching camel-caravan will no longer find employment; but for the present these lands lie quiet, and there is still an unknown Mongolia.

Our Forerunners

THERE are no means of going back as far as the discovery of Mongolia. Such a term is scarcely applicable to this part of Asia, which can never have been entirely unknown to the West. It is one of those lands which was known to Europe in the early ages; then it was forgotten,—for many centuries Mongolia disappeared off the world's stage,—only to be rediscovered once more during the latter half of last century.

We must retrace our steps as far as the fifth century, to find the first communications that passed between Mongolia and the West. Upper Asia—then called Tartary—first came in contact with the outside world through the medium of Nestorian missionaries, who in those early days penetrated to the furthermost East, but by whose agency very little information respecting these far-off lands filtered through. In the fourth, fifth, and sixth centuries successive waves of Asiatic invaders poured westwards, namely, the Huns, those wild shepherd-warriors from the east, who materially altered the history of Europe.

It was not until the twelfth century that Tartary made the first real impression on the West. The earliest accounts of Mongolia and its people, which came through to us, were indeed romantic; Europe was then staggered by the reports which reached her of the triumphs and might of that semi-mythical personage "Prester John"-Khan of the Keraites-and of his supposed conversion to Christianity. Embassies went to and fro between the Courts of Europe and the Khan of the Keraites. High Asia loomed large in the imagination of the peoples of the West. Missions were sent out to brave the bleak steppes of Central Asia, in order to carry letters from the Pope, the King of France, and the Christian Emperor of Constantinople. Prester John managed to create an exaggerated excitement in Europe.

Then followed the Mongol invasions, and the Western world learnt only too well the character and nature of the Tartars, for the stupendous movements that originated in Mongolia, early in the thirteenth century, brought Europe into close relationship with the Mongols. It is a strange fact that we of the West never came in contact with these crude but successful warriors, until they

visited us in Europe. All through the thirteenth century there was close intercourse between Europe and Tartary, chiefly, it is true, by reason of wars and invasions, but later also by means of intelligent missionaries, who were sent to convert the barbarians, and who gave us the first realistic account of Mongolia and the Mongols.

When the Mongols retired from Poland and Hungary, and the height of their lust for conquest was attained, there followed a period of more peaceful intercourse between Europe and Middle Asia. The rulers of Europe began to despatch emissaries to the Mongol Khans, and the Pope authorized missions to propagate religion and to encourage civilization amongst the barbarians, with the idea of changing the ferocious Tartars into mild and peace-loving people. Of these emissaries, two, John de Carpini and William of Rubruck, Franciscan monks, have given us excellent accounts of their impressions of the Mongols, and I repeatedly quote from the narratives of these two earliest Western travellers in Upper Asia. Carpini achieved the distinction of being · the first Western traveller to make mention of the existence of the Mongol capital, Karakorum; and Rubruck was the first to actually visit it. Besides these, we have the story of Marco Polo, who includes in his wide-ranging descriptions allusions to parts of Northern Mongolia, and an account of its ancient capital.

After this, there followed a period during which we gained but little information; for the next three hundred years there was a blank in the history of intercourse between Mongolia and the West. The Mongol had already sunk from his high estate; his power was no longer a

source of wonder and fear to the Western world. centre of interest changed to Cathay, and affairs with cultivated China blocked out all thought of the wild Mongolian steppes and their barbaric nomads. Formerly the Tartars were only approached by the landward gates: it was by bravely facing the thousands of miles of barren Central Asia that the embassies and missions reached the Court of Karakorum; but now the depths of Tartary were forgotten, for men sailed in ships to the great ports of China. Thus, after the destruction of the Mongol power, and the retirement of the warrior-hordes to the innermost steppes, Tartary sank into oblivion, and for the time being all intercourse between it and the West discontinued. We hear very little of Tartary until the ever-pushing, insatiable ambition of a European Power found itself suddenly face to face with the desert frontiers of China, and the Russian Empire marched with Cathay along a vaguely delimitated border-land; then only did Mongolia begin to occupy a place in the minds of the scientist, the politician, and the trader.

As previously mentioned, it was men of Russian nationality who were chiefly responsible for the exploration of these regions. The great unknown that lay beyond the Siberian frontier, fifty years ago, was a "lodestar" to the Russian pioneers, who were for ever pushing on from the newly acquired territories into what they imagined might be richer lands. Slowly the great waves of European influence spread towards Inner Asia. Russia from the North, Great Britain through India, and in the east both these nations vied with other Great Powers for their share in a possible partition of China. With the quick flow of Russian colonization in Siberia, the

Russians were the first to reach the borders of Mongolia, and her territories there bordered on the ancient lines of the Chinese frontier.

It was early in the seventeenth century, that Russia began seriously to attempt to open up communication between her new Siberian possessions and China. All through this and the succeeding century there were repeated missions passing between the Courts of Pekin and Russia, but the intervening lands of Mongolia received only scanty attention at the hands of these early emissaries—China, not Mongolia, being their objective.

Mongolia was not such a land as would tempt a hasty exploration. Its trade was not such as would be an incentive to rapid penetration by merchants and traders, nor have strategical possibilities acted as an inducement to military occupation by a foreign Power; neither has popular enthusiasm in Europe helped on the exploration of Mongolia, as it has done with Africa or the Poles. There has been no great prize awaiting the traveller who has undertaken laborious journeys in this far land, and no great mystery has awaited solution. Only the historical fact of this being the home of the Mongols, the birthplace of the greatest scourge with which it has pleased Providence to punish the West, allows Mongolia to take a place amongst the most interesting regions of the world. To men of science, then, are we chiefly indebted for the rediscovery of Mongolia.1

¹ In treating of the early travellers to the region we visited, I use the term "Mongolia" in its widest sense—namely those wide, open lands which lie along the northern border-lands of the Chinese Empire, from Turkestan to Manchuria. In old days the term applied to this region was "Tartary," but that name was also extended to other parts of Central Asia which were then being overrun by the Mongols. In dealing with the more recent exploration I reserve Mongolia as the name for that region

In the middle of the nineteenth century the first scientific pioneers looked beyond this frontier, and, with the craving for the "unknown" which comes to all true men, set out to penetrate the wastes which lay between them and the Great Wall of China. The romance of exploration has no more enthralling chapter than the Russian penetration of Central Asia and Far Western China. It was a great undertaking, well suited to the Muscovite mind. The Russian does everything on a vast scale. His journeys are colossal undertakings. Prjevalsky, the pioneer, covered 19,500 miles of route, and spent nine years and four months in accomplishing it. Kozloff crossed the Great Gobi five times, and in three different directions!

The Russian exploration of inner Asia was a methodical undertaking, part of a great Plan organized by the Imperial Russian Geographical Society of St. Petersburg, under the able Vice-Presidency of A. M. Semenof. For the last forty years a small army of topographers has been mapping that vast country, and scientists have which is ruled by the hereditary Mongol Khans-the true Mongolia. Dzungaria fulfils the duty of title of the western portion of this region; while the "Upper Yenisei basin" most suitably describes the enclosed sources of that great Siberian river. Of the whole area we traversed, this latter is the only one of which I can scarcely find mention in the old days. Apparently it remained undiscovered until 1860, when the modern traveller found it out. Raschid, who wrote a history of the tribes of Asia in the fourteenth century, made mention of certain reindeer-keepers of the Upper Yenisei, referring either to the Tunguses of Southern Siberia or actually the Uriankhai. His account certainly suits the latter, for he describes them as dressing in deer-skins, keeping neither oxen nor sheep, as living in birch-huts and using snow-shoes. Marco Polo shows a knowledge of certain reindeer-keeping people such as are the inhabitants of the Upper Yenisei basin, whom he describes as being "a very wild race," who "live by their cattle, the most of which are stags, and these stags," he assures us, "they used to ride upon." But these early references to the tribes of Southern Siberia are too vague to allow us to put them down as referring directly to those of the Upper Yenisei region.

been describing her wonders. All the energies of Russian travellers have been concentrated on this region. The great Empire which stretches for 3,500 consecutive miles across Asia might have had her work cut out in surveying her own lands without of necessity paying attention to those of others; yet she has found time during the last sixty years not only to explore her own territory, but to take the field against other nationalities in the colossal work of reducing areas equally as vast, such as Mongolia, Eastern Turkestan, Northern Tibet, and Western China, to the scale of a map. The Russian "40 versts to an inch" survey is the standard map over some 8,761,000 square miles of Asia. It should, however, be noted that the whole area is contiguous, almost under the same physical conditions, and—a still more unique and important consideration—mostly united under one Government, which alone has made possible thorough investigation and research.

As the towns of Southern Siberia, namely, of the provinces of Semipalatinsk and the Yeniseisk, grew to be of importance, traders began to push farther southwards, and to make long expeditions into Mongolia in order to exploit the wealth of the country. These pioneers brought back the first information of the great plateauland, of the wandering nomads, and their unlimited herds. It is noteworthy that, whereas our earliest information concerning Mongolia came through the medium of zealous missionaries in the thirteenth century, the pioneers of the nineteenth century who rediscovered Mongolia were traders and scientists.

¹ Published by the Topographical Section of the Russian General Staff, St. Petersburg.

In this survey of previous exploration we can only deal with the work achieved in the region immediately under our notice. The majority of the travellers mentioned, covered far wider areas than those regions to which we draw attention. Many of them ran route-surveys across Mongolia on their way to Tibet and Turkestan, or mapped the Tian Shan ranges en route for China; in consequence we find little-known regions quite close to the Siberian frontier. These explorers, eager for greater prizes, neglected the lands that lay nearest to them and pushed ahead into the farther unknown.

Up to quite recent times, the maps showed a remarkable lack of knowledge, on the part of the map-makers, of the true topography of Mongolia and Dzungaria. This lack of knowledge accounts for their divergence from the truth. For instance, fantastic lakes were coloured blue where now dry steppe is proved to exist, and "Gobi" (desert) was then broadly written across unknown tracks, which now show pleasant hill-country where no mads. camp and wild game find pasture. The map of the Upper Yenisei, the Syansk and Tannu-ola ranges, is still very poor in detail, chiefly on account of the impenetrable nature of those regions, where survey-work presents insuperable difficulties. Mongolia is an easier country to map, but even here there is a great want of really accurate work, especially in the mountains. In the Altai and in Eastern Tian Shan, the case is the same. The following résumé of exploration is intended to give an idea of the previous work carried out in this region, and by whom it was accomplished.

In spite of the fact that the Russians were first on the spot, and the monopoly of exploration was theirs,

the earliest traveller of whom I can find record, to penetrate into those depths of Mongolia, was an Englishman. Thomas Whitlam Atkinson, an artist, traversed such an incredible distance over this part of Asia—at a most interesting period, between the years 1853-601that his accounts were at first received with incredulity. His reputation as a traveller was entirely based upon the extent of his wanderings (he claims to have covered 39,500 miles of country in the course of his seven years' wandering). His qualifications stop there; he made no addition to scientific knowledge, his unsatisfactory narratives are almost impossible to follow, and in the light of scientific research his achievements carry no weight. But there is little doubt that he actually accomplished the routes he describes. With travel in Siberia he included a ride across the heart of Dzungaria into North-west Mongolia, and back again to the Russian Altai: he claims to have been the first European to set eyes on the Tian Shan mountains and the basin of the Upper Yenisei, but to this later journey he pays no further attention than merely drawing his route on the map. His journeys cover the whole vast region between Kulja, in the Ili Valley, Omsk, Irkutsk, and Barkul.

The first true explorer was a Russian—Matussovski—who did magnificent pioneer work all through Northwest Mongolia and Dzungaria. His labours began in

¹ That there had been scientific explorers on the frontiers before this date is shown by the volume published in 1845 by P. de Tchihatcheff, in which the writer describes a journey undertaken, by order of the Czar, to the "Eastern Altai and the adjacent regions on the frontier of China." No doubt there were others, but the literature on the subject is extremely difficult to get hold of, and as often as not the reports of the early travellers were not for public circulation.

1870, and extended over a period of five years. At first, under the leadership of Pavlinoff, he was in the Uliassutai country, and in the Upper Yenisei basin, being the first true explorer of whom I can find record to visit that region. Later, in 1872-3, with two companions, he penetrated as far as the eastern spurs of the Tian Shan, having crossed the desert from Uliassutai. This journey included a visit to Guchen and Barkul, and finished up with a fine bit of pioneer work along the course of the Urungu River from source to mouth in the Ulungur Lake, together with considerable tracking up and down the southern slopes of the Mongolian Altai. In 1875 Matussovski turned up again at Barkul, at the end of a long journey from China, having come this time from the south. Strenuous travels these, and for the most part composed of actual pioneer work. Matussovski was the first to probe the depths of Mongolia, and his energy shed a flood of light over this great lone land lying along the Russian frontier.

At the same time another pioneer was filling in large blanks on the map. Potanin—the Cossack officer—young, keen, and eager to throw himself into the romantic life of an explorer after he had suffered disappointment and exile on account of political intrigue. He made long and laborious route-surveys, marking, with red lines, his route over thousands of miles of unknown country; and, what is even more important, he gave us many bulky volumes describing in detail the regions he visited. Potanin still lives, a veteran of seventy-five years; he is the greatest living authority on the exploration of Mongolia, and is still capable of putting together the results of his journeys at his home in Omsk.

In 1876-7 Potanin covered the country between such widely separated places as Zaisan, Kobdo, Barkul, Uliassutai and Lake Kossogol. In 1879 he visited the Upper Yenisei basin and the Turgun Mountains. Some years later he made further long journeys, but in regions outside those which our descriptions embrace—such as in the Ordos, Koko Nor, and the central Gobi.

In 1872 a somewhat unusual expedition took place, which well illustrates the plodding and pioneering instincts of the Russians, whose remarkable exploits in Central Asia correspond to the great "treks" of the Boer traders in the early days of South Africa. A Russian merchant of Zaisan, on the Siberian frontier of Dzungaria, conceived the idea of outfitting and despatching a trading expedition into the remote corners of North Mongolia. The party was formed, and eventually trekked over some 1,700 miles of unknown country; they visited Kobdo, Uliassutai, Barkul, Guchen, before returning to Siberia. This expedition was carried out on the strength of the Russian commercial treaty with China, which opened up Mongolia and Dzungaria to Russian traders.

In the following year (1873) another Englishman appeared upon the scene—Ney Elias, who ran a route-survey from Pekin to the head-waters of the Ob River in Siberia, and, passing through North-west Mongolia on the way, left us the first accurate account of North Mongolia. Potanin, with his companions Rafailow, Matussovski, and Sosnovsky, together with Pievtzoff, who worked in the Altai, Eastern Dzungaria, and Mongolia, and Regel, the botanist,—these are responsible for the maps of this region up to the year 1879.

At this point comes in the renowned Prjevalsky, who has had a hand in every map of the Russian-Chinese border-land, and has achieved such a brilliant series of discoveries. His labours had hitherto lain mostly far to the south—on the Tibetan borders, and in the Southern Gobi; but in 1879, on his way to Tibet, he crossed the deserts of Dzungaria and visited the Eastern Tian Shan. Prjevalsky, with his unique training as soldier, geographer, and naturalist, has left us the most fascinating records of travel, containing mines of information and much detailed research.

In the eighties we have five travellers of note, who worked over widely different areas. In 1881 Adrianoff—who had already gained experience under Potanin on his second journey—visited the Kemchik region of the Upper Yenisei basin, and the Tannu-ola range and Kossogol. He has since written considerably on the antiquities of these regions.

Four years later Klementz also worked at the antiquities and the geology of North Mongolia, and his studies embraced a very large field; he made extensive journeys in North-western Mongolia between the years 1885-97, both on his own account and also under the leadership of Professor Radloff. Klementz covered very large areas of country; he was the first to explore the Kemchik sources of the Upper Yenisei, he also visited the sources of the Khua-Kem, and twice crossed the "divide" between the Upper Yenisei and Lake Kossogol. Later, being employed on the expedition sent out by the Academy of Sciences of St. Petersburg to investigate the ruins of ancient Karakorum, he was in a position to make extensive journeys on his own

account over the whole area between Urga and the Altai, his routes crossed and recrossed the basins of Kobdo and Ubsa, they included traverses of the Tannuola and the Eastern Altai, and demonstrate the fact that he explored the sources of the Black Irtish, the Saksai, and Tsagan-gol sources of the Kobdo River, that he travelled round Achit Nor and the Turgun Mountains, not to mention far-reaching journeys towards the east, in regions which are outside the scope of our descriptions.

In 1887, two Englishmen visited the southern borders of our region—Captain (now Sir Francis) Younghusband and Colonel Mark Bell. The former traversed the Northern Gobi from Pekin to Hami, and eventually passed to Chinese Turkestan and India. The latter took the southern route through China to Hami, and went on to Barkul and Guchen. The accounts given us by these two travellers are the only ones in English up to date (excepting Dr. Stein's recently published work) of that out-of-the-way corner of Central Asia—the Hami and Barkul ranges. Another expedition of note passed through the same district two years later; this was led by the brothers Grum Grjimailo—naturalists—who published their results in three fine volumes, in which they have a good deal to say on the subject of the far Eastern Tian Shan, where they worked for some time on their way to Western China.

In 1892, we have to record the visit of the botanist Kriloff to the region of the sources of the Upper Yenisei; but his account does not amount to much beyond a laboriously kept diary. Pozdnyeff, a student of anthropology and archæology, carried on work at the same time in the countries between Urga and Kobdo.

The following year Kozloff, an explorer of great parts, came into the arena. When serving under Roborovsky, Kozloff surveyed in the Hami] region on his way back from greater labours in Western China; a few years later he again took the field and put finishing-touches to the maps of the Eastern Altai ranges before crossing the central portion of the Great Gobi. These last journeys extended over the years 1899–1900; since then, in 1908–9, Kozloff has again worked in the central Gobi and in Southern Mongolia.

At about this date (1895), Borodaile, of the Indian Civil Service, the first Englishman to visit the site of the ancient Karakorum, proceeded from Pekin to Kobdo and gave us some account of that portion of Mongolia. In 1898-9, an account was published of the Importance of the Uriankhai Country to Southern Siberia, by Ostrovsky, containing the results of a research into the economic conditions of the Upper Yenisei basin. Another general description of this out-of-the-way region was published by Paikoff. The last visitor to these regions was M. Paul Chalon, who in 1904 rode from the Minnusinsk steppes to the Kemchik Valley in the western portion of the basin.

During the last eight years the work has been of a more concentrated type, the finishing-off in careful detail of roughly mapped areas. Obrucheff, after great achievements in the Southern Gobi and Ala Shan, set to work in 1905-6 to thoroughly explore the Northern border-ranges of Dzungaria, the Barlik and Sair groups; and in 1909 Sapoznikoff carried out surveys in the Altai, in the region of the sources of the Black Irtish and Kobdo Rivers.

The Altai Highlands have long attracted the attention of travellers, and of these perhaps the veteran is Prof. Sapoznikoff, who for fifteen years has made profound researches into the geology, botany, and physical geography of these alpine regions. Until 1905 his work lay in the true Russian Altai, but between 1905-1909 he investigated the long chain which he calls the Mongolian Altai (but which is generally misnamed on our maps the "Great Altai"), and which extends in a south-easterly direction into Chinese territory. The results of his journeys have recently been published at Tomsk, and this book includes so many different branches of science that it must take its place as the standard work on the Mongolian Altai. This range divides Mongolia from Dzungaria, and the story of its exploration affects our narrative in that, after hunting for some time on its north-eastern slopes, we crossed the heart of the main range into Dzungaria.

The antiquities of North-west Mongolia and of the Upper Yenisei basin received full attention from M. Granö in 1906. Since then specialists at the universities of Siberia have been busy working out the material collected on this subject by various travellers.

Apart from this, two journeys of importance have been accomplished in the northern parts of Mongolia—notably, by Major de Lacoste, who visited the interesting valley of the Tess whilst on his way from Urga to Kobdo, and by Dr. Paquet, who went, in 1908, from Kobdo to the Lake Kossogol. These were the most recent travellers in the northern portion of the region under discussion. During the last six years a few explorers have, however, touched on the southern edge of our region. Of these,

Dr. Aurel Stein and Mr. Clementi claim prior attention on account of the thoroughness of their work. At Hami and on the southern slopes of the Karlik Tagh, our surveys and descriptions overlap with Stein's work, as described in Chapter LXXXI. of his recent book, Ruins of Desert Cathay. Clementi's work only affects ours in that, at this point (Hami) his complete series of astronomical observations carried out systematically across the whole width of China from Kashgar to Kowloon (Hong-Kong), must be recognized as the most reliable.

In the winter of 1909 Lieut. Etherton rode along the north-western frontier of Dzungaria, between Kulja and the Altai, and during our own journey we came across Colonel Pereira, who was also traversing this region previous to carrying out further explorations in Western China. On the southern border-ranges—the Tian Shan and Bogdo-ola—we are dependent upon the detailed and most careful researches of Dr. Merzbacher, who explored the alpine region of the Eastern Tian Shan in 1909.

From this rough survey of previous exploration, it will be seen that the country has been visited by numerous travellers, the great majority of whom were Russian. A certain number of these travellers published accounts (the majority did not do so), and from these, many of them scanty and ill-written journals, we have to extract all information. Apart from this, our region remains untouched and undescribed. In order to make our account of the region as complete as possible, and to give a fair idea of these vast stretches of country, which are to all intents and purposes an unknown land to the English reader, I am trying to put on record all the information

I can possibly collect from our own carefully kept diaries and from those of previous travellers.

Our journey was accomplished and the greater part of this account written, before the proclaiming of an independent Mongolia. The conditions of the Upper Yenisei basin are here described as they were in 1910, but it will be noticed that a vague impression of coming change permeates the whole narrative. In the early part of this book I have made no reference to the new influences, but in the later chapters—especially Chapter X—I have supplemented our experiences by allusions to the new state of affairs. On the whole, this account must be taken as a study of the local conditions up to the year 1911.