JAMES BRYCE BRYCE

SOUTH AMERICA OBSERVATIONS AND IMPRESSIONS

James Bryce Bryce

South America Observations and Impressions

http://www.litres.ru/pages/biblio_book/?art=24170060
South America Observations and Impressions New edition corrected and revised:

Содержание

PREFACE 4
INTRODUCTION 6
CHAPTER I 15
CHAPTER II 50
CHAPTER III 87
CHAPTER IV 131
Конец ознакомительного фрагмента. 152

South America Observations and Impressions New edition corrected and revised

PREFACE

This book records observations made and impressions formed during a journey through western and southern South America from Panama to Argentina and Brazil *via* the Straits of Magellan. The nature of its contents is briefly outlined in the Introduction which follows, so all that I have to do here is to acknowledge gratefully the many kindnesses I received in every part of South America which I visited, and in particular from the following persons: Colonel Goethals, Chief Engineer of the Panama Canal, and other officers of the United States engineers stationed there, and Colonel Gorgas, head of the medical staff; the officials of the Peruvian Corporation in Lima and of the Peruvian Southern Railways in Mollendo, Arequipa, and La Paz; the officials of the Antofagasta and Bolivia Railroad Company; those of the Transandine Railway Company in Chile and those of the Buenos Aires and Pacific and Argentine Great Western Railways

Companies in Mendoza and Buenos Aires, and also those of the Leopoldina Railway in Brazil. Nor must I fail to express my obligations to the heads in New York of the firm of Messrs. W. R. Grace Co., who advised me regarding my journey, and to my friend Professor Bingham of Yale University, who, familiar with South America from his own travels and studies, has given me valuable help in many ways.

I have also to return my respectful thanks to the Governments of Chile and Brazil, who were good enough to extend to me facilities for travel on their railways, and to the Governments of Peru, Bolivia, Argentina, and Uruguay for other courtesies. To many statesmen and scholars in these six republics, too numerous to mention by name, as also to not a few of my own fellow-countrymen from Britain and Canada who are there settled, I am indebted for hospitality, for private acts of kindness, and for valuable information.

JAMES BRYCE.

June 27, 1912.

INTRODUCTION

Whoever read as a boy the books of old travellers in the Andes, such as Humboldt's *Aspects of Nature*, or pored over such accounts of the primitive American peoples as are given in Prescott's *Conquest of Peru* must have longed to visit some day the countries that fired his imagination. These had been my experiences, and to them there was subsequently added a curiosity to learn the causes which produced so many revolutions and civil wars in Spanish America, and, still later, a sense that these countries, some of them issuing from a long period of turbulence, were becoming potent economic factors in the modern world. So when after many years the opportunity of having four clear months for a journey to South America presented itself, I spent those months in seeing as much as I could within the time, and was able to make some observations and form certain impressions regarding the seven republics I visited. These observations and impressions are contained in the following pages. They are, of course, merely first impressions, but the impressions which travel makes on a fresh mind have their value if they are tested by subsequent study and by being submitted to persons who know the country thoroughly. I have tried so to test these impressions of mine, and hope they may be of service to those who desire to learn something about South America, but have not time to peruse the many books of travel

that have been written about each of its countries.

The chief points of interest which these countries have for Europeans and North Americans may be summed up as follows: —

1. The aspects of nature.

2. The inhabitants, the white part of whom are of Spanish origin, except the Brazilians, who come from Portugal.

3. The economic resources of the several countries.

4. The prospects for the development of industry and commerce.

5. The relics of prehistoric civilization.

6. The native Indian population.

7. The conditions of political life in the several republics.

It may be convenient that I should explain how far and in what order each of these topics is dealt with.

The first eleven chapters of the book contain a description of what I saw of scenery and of social and economic phenomena in the seven republics of Panama, Peru, Bolivia, Chile, Argentina, Uruguay, and Brazil, and in these chapters the first three of the above-mentioned subjects are dealt with when and as each country is described. It is Nature that chiefly engages the traveller's mind in Peru and Bolivia, as it is economic development which interests him in Argentina and Uruguay. In Chile and Brazil he must be always thinking of both. The fourth topic has been treated so fully by many writers who have brought special knowledge to it and have written professedly

for the information of business men, that I have not thought it necessary to fill this book with statistical tables or, indeed, to do more than indicate the possibilities for commercial development or agricultural immigration which the natural resources of each country seem to promise.

It is only in Peru and Bolivia that any prehistoric monuments exist. Some of the most important and interesting of these I saw, and in describing them I have endeavoured to convey an idea of the character of the ancient Peruvian civilization (if that name can properly be applied to it) and of the people who produced it. This is done in Chapters III, IV, and V.

Only in Peru, Bolivia, and Chile did I have opportunities of seeing the native Indians. In the two former states they constitute a part of the total population far larger than in any other state (except Paraguay): they are nominally Christians, and they lead a settled agricultural life. In Chile there is only one considerable Indian tribe remaining, the famous Araucanians. Of these warriors, of the Quichuas in Peru and of the Aymarás in Bolivia, some account will be found in Chapters III to VI.

In the above-mentioned eleven descriptive chapters I have endeavoured to individualize, so to speak, the chief countries of South America, so as to bring out the chief characteristics, natural and human, of each of them.

But marked as are the differences between the various republics, they have all something in common, something that belongs to South America as opposed to Europe or North

America or Australia. There are also certain general questions affecting the whole Continent which present themselves to the traveller's mind and need to be discussed upon broad and general lines. To these questions the last five chapters of the book have been devoted. One chapter endeavours to indicate the causes which have divided the vast Spanish-American dominion (including Mexico and Central America) as it stood in A.D. 1810 into the sixteen independent republics of to-day, some of which have become, others of which are becoming, true nations with marked national characteristics. Another chapter deals with the relations to the white population of the aborigines in the Spanish countries and of the negroes in Brazil, the only state in which negroes are numerous. It is a subject of study all the more interesting because these relations are altogether different from those borne by the European element to the coloured races in the British colonies, in India, and in the United States of North America, and also because the intermixture of races which is now going on in South America suggests physiological and ethnological problems of high interest.

A third chapter (Chapter XIV) briefly compares the conditions of settlement and of government which determined the course of economic and political development in North and in South America respectively and enquires how far the latter Continent is to be considered any more closely related to the former than it is to Europe. Is there, in fact, such a thing as that which the word Pan-Americanism is intended to describe,

or does the expression denote an aspiration rather than a fact?

Of the political history of these republics very little is said in this book, and of their current politics nothing at all. That is a topic on which it would not be fitting for me to enter. But in travelling through the seven countries, in observing their physical features and the character of their people, and the state of knowledge and education among them, as well as in reading accounts of the kind of administration which the Spanish Crown gave them during nearly three centuries, I was struck by the influence which all these facts must have had upon the free governments which the Revolutionary leaders tried to set up when they broke away from the mother country. The history of Spanish America since 1810 cannot be understood or fairly judged, without taking these things into account. They have been the fundamental and determinative conditions of political life in these countries; and to them Chapter XV has been devoted.

In the last Chapter (XVI) I have touched upon several subjects relating to the South American lands and peoples in general for which no appropriate earlier place could be found, and have indulged in a few conjectures as to the future both of the several states and of the Continent as a whole. These are not meant as predictions, but rather as suggestions of possibilities which may serve to set others thinking.

Lest some of the views presented, especially those regarding the native races and political conditions should be deemed unduly optimistic, let me try to meet any such criticism by a few words

on optimism in general.

Pessimism is easier than optimism, as it is easier to destroy than to construct. There was an old dictum in the Middle Ages, "*Omnia tendunt naturaliter in non esse*,"[1] and Mephistopheles in Goethe's *Faust* tells us that

> Alles was entsteht
> Ist werth dass es zu Grunde geht.[2]

If pessimism is easy, the more need to stand on guard against it.

The duty of a traveller, or a historian, or a philosopher is, of course, to reach and convey the exact truth, and any tendency either to lighten or to darken the picture is equally to be condemned. But where there is room for doubt, and wherever that which may be called the "temperamental equation" of the observer comes in, an optimistic attitude would seem to be the safer, that is to say, likely to be nearer to the truth. We are all prone to see faults rather than merits, and in making this remark I do not forget the so-called "log-rolling critics," because with them the question is of what the critic says, not of what he sees, which may be something quite different. If this maxim holds true, it is especially needed when a traveller is judging a foreign country, for the bias always present in us which favours our own national ways and traits makes us judge the faults of other nations

---

[1] All things tend naturally towards non-existence. So in the original statutes of Oriel College, Oxford (founded in A.D. 1327).

[2] All that comes into being deserves to perish.

more severely than we do those with which we are familiar. As this unconscious factor often tends to darken the picture that a traveller draws, it is safer for him, if in doubt, to throw in a little light so as to secure a just result. Moreover, we are disposed, when we deal with another country, to be unduly impressed by the defects we actually see and to forget to ask what is, after all, the really important question, whether things are getting better or worse. Is it an ebbing or a flowing tide that we see? Even in reflecting on the past of our own country, which we know better than we do that of other countries, we are apt, in noting the emergence of new dangers, to forget how many old dangers have disappeared. Much more is this kind of error likely to affect us in the case of a country whose faults repel us more than do our own national faults, and whose recuperative forces we may overlook or undervalue.

Such considerations as these have made me believe that the natural propensity of a West European or North American traveller to judge Spanish Americans by his own standards needs to be corrected not only by making allowance for differences of intellect and character, but also by a comprehension of the history of these peoples and of the difficulties, many of them due to causes outside their own control, which have encompassed and entangled them ever since their ancestors first set foot in the Western world. Whoever compares these difficulties as they stand to-day with those of a century ago will find grounds not only for more lenient judgments than most Europeans have

passed, but also for brighter hopes.

Neither in this matter, however, nor anywhere in the chapters which deal with the social and political conditions of South America have I ventured to dogmatize. My aim has rather been to start questions and to indicate various sides from which South American problems may be approached. The interest of these new countries lies largely in the fact that while some problems already familiar to the Old World, have here taken on new aspects, others appear here almost for the first time in history. Some of them involve phenomena of race growth and race intermixture for the investigation of which the data we possess are still insufficient. Others turn upon the still unascertained capacity of European races for working and thriving in tropical countries. It may take many years before science can tell us half of what we desire to know regarding the economic possibilities of the central regions of the Continent, for the development of which no labour is now available. The future of the temperate South is more certain, for all the material conditions that make for prosperity in North America and Australia are present there also. These countries will be the home of rich and populous nations, and possibly of great nations. The most interesting of all the questions which a journey in South America suggests are those which concern the growth of these young nations. What type of manhood will they develop? What place in the world will they ultimately hold? They need fear no attacks from the powers of the Northern Hemisphere, and they have abundant resources

within. Their future is in their own hands.

CHAPTER I
THE ISTHMUS OF PANAMA

South America is bounded at its northern end by an isthmus and at its southern by a strait. They are the two gateways by which the western side of the Continent, cut off from the western and central portions by a long and lofty mountain range, can be approached from the Atlantic. It was by crossing the Isthmus that Vasco Nuñez de Balboa discovered the South Sea. It was by penetrating the Strait that Magellan, seven years later, discovered that this South Sea was a vast ocean stretching all the way to the coasts of Asia. In old Spanish days all the commerce of the west coast passed over the Isthmus,[3] but when the days of steam navigation arrived, that commerce passed through Magellan's Strait. Now the Isthmus itself is to be turned into a strait and will be a channel for sea-borne trade, the main gateway to the West.

An isthmus and a strait are, to the historical geographer and to the geographical historian, the most interesting things with which geographical science has to deal. Commerce and travel and naval warfare concentrate themselves at the spot where a narrow channel connects wide seas, and the strip of land which severs two seas from one another interposes a barrier to water-borne trade and turns it off into other directions. It becomes a

---

[3] The trade to the Philippines crossed the Continent at Tehuantepec.

point the control of which can stop the march of armies, and it furnishes a central stronghold whence ships can go forth to threaten the neighbouring coasts. Thus every strait and every isthmus has a high commercial importance, and almost always a political importance also, since lines of commerce have usually been, and are now more than ever, potent factors in human affairs, while the command of a water passage for fleets, or that of a land passage for armies, may be of capital importance in war.

The Eastern Hemisphere has an isthmus which has been significant for world commerce and for world history almost from the beginning of civilization. It is the Isthmus of Suez. So the Western Hemisphere has its isthmus of supreme importance, – that of Panama. It is a link between continents and a barrier between seas, which, though its history is far shorter than is that of Suez, yet has been at some moments in the last four centuries, and may be still more hereafter, of high significance for the movements of the world.

There are some notable points of similarity between these two isthmuses. Their breadth is not very different, – Suez sixty miles, Panama about fifty-four. The shortest line across each runs nearly due north and south. The continents which each unites are gigantic. Each lies in what is, or was till quite lately, a practically uninhabited country.

Here, however, the likeness ends; and we come to points of contrast that are more remarkable. The Isthmus of Suez is flat as

a table from one end to the other; that of Panama is covered with high and generally steep hills. Suez is an arid waste, where there is not a brook and scarcely even a well, and by consequence not a tree, nor any growing thing save a few thin and thorny shrubs. Panama has a tremendous rainfall in places, varying from one hundred and forty inches a year on the north side to sixty on the south, and is covered with wood so dense that roads have to be not only hewn through the forest but defended by incessant cutting against the efforts of a prolific nature, always seeking to reassert her rights. Having a keen, dry, desert air, the whole Suez region is a healthy one, where man need fear disease only in those few spots which he has in recent years brought under irrigation. Panama had for centuries a climate so deadly that even passing travellers feared to halt more than a few hours on either side of the Isthmus. Yellow fever, intermittent and remittent fevers, and all sorts of other tropical maladies made it their favourite home.

A still more remarkable contrast, however, between these two necks of land lies in the part they have respectively played in human affairs. The Isthmus of Panama must, in far-off prehistoric days, have been the highway along which those wandering tribes whose forefathers had passed in their canoes from northeastern Asia along the Aleutian Isles into Alaska found their way, after many centuries, into the vast spaces of South America. But its place in the annals of mankind during the four centuries that have elapsed since Balboa gazed from a mountain top rising out of the forest upon the far-off waters of the South

Sea has been small, indeed, compared to that which the Isthmus of Suez has held from the beginning of history. It echoed to the tread of the armies of Thothmes and Rameses marching forth on their invasions of western Asia. Along the edge of it Israel fled forth before the hosts of Pharaoh. First the Assyrian and afterwards the Persian hosts poured across it to conquer Egypt; and over its sands Bonaparte led his regiments to Palestine in that bold adventure which was stopped at St. Jean d'Acre. It has been one of the great highways for armies for forty centuries, as the canal cut through it is now one of the great highways of commerce.

The turn of the Isthmus of Panama has now come, and curiously enough it is the Isthmus of Suez that brought that turn, for it was the digging of a ship canal from the Mediterranean to the Red Sea, and the vast expansion of Eastern trade which followed, that led to the revival of the old designs, mooted as far back as the days of the Emperor Charles the Fifth, of piercing the American Isthmus. Thus the comparison of the two isthmuses becomes now more interesting than ever, for our generation will watch to see whether the commerce and politics of the western world will be affected by this new route which is now being opened, as those of the Old World have been affected by the achievement of Ferdinand de Lesseps.

So many books have been written, and so many more will be written, about the engineering of the Panama Canal and about its commercial possibilities, that of these very little need be said

in such a sketch as this. But as everybody is already curious, and will, two years hence, be still more curious regarding the region it traverses, I shall try to convey some sort of notion of the physical aspects of the Isthmus and of the impressions its past and its present make on the traveller's mind. In taking the reader with me across the neck of land, I shall in the first instance say nothing of the works of the canal which I saw in course of execution, but will ask him to remember that it runs, as does the Trans-Isthmian railway, from north to south, the coast-line both on the Atlantic and on the Pacific side trending in this region east and west.[4]

Approaching in the steamer from Europe or New York across the Caribbean Sea one sees low hills rising gently from the shore, fringed with palms and dotted with small white houses half hidden among the trees. In front, on an islet now joined to the mainland, is the town of Colon, a new town, with a statue of Christopher Columbus "protecting" a female Indian figure of America, but no buildings of interest and little history, for it is only sixty years old, built as the terminal point of the railway. The old fortified ports where the Spanish galleons used to lie at anchor in former days, Nombre de Dios and Puerto Bello, stand farther to the east. Behind the town, higher hills, covered with those thick, light green woods that characterize the tropics, cut off the view to the south. No depression in the land is visible. There is nothing to suggest that another ocean lies

[4] The reader will find at the end of the volume a small map which may help him to understand the topography of the region.

beyond, only fifty miles away, and that here the great backbone which traverses two continents for many thousands of miles sinks to a point a few hundreds of feet above sea level.

The traveller on landing steps into the railroad car, and after running for three miles along the shore of the shallow bay of Limon into which the Canal is to issue, strikes in four miles more the valley of the Chagres River. Here is the point (to be described later) at which the huge Gatun Dam is being built across that valley to flood it and turn it into a navigable lake. Thence the line keeps in the same general south-southeast direction on the east side of the Chagres River, parallel to its course. The Chagres, a muddy and rather languid stream, has in the dry season about as much water as the Scottish Tweed and in the wet season rather more than the Potomac and much more than the Shannon. There are few stations on the way, and at first no dwellings, for the country was uninhabited till the work of canal construction began. Morasses are crossed, and everywhere there is on each side a dense, dark forest. So deep and spongy are the swamps that in places it has been found impossible to fill them up or to lay more than one set of rails upon the surface. So dense is the forest, the spaces between the tree trunks filled by shrubs and the boughs bound together by climbing plants into a wall of living green, that one cannot see more than a few yards into the thicket, and can force a way through it only by the help of the *machete*, – that long, cutlass-like knife which people carry in Spanish America. Hardly a trail running into the woods is

seen, and a mile or two back the wild cats and monkeys, and their terrible enemies, the anacondas or boa constrictors, have the place all to themselves.

After some twenty-three miles of this sort of country, beautiful when the outer boughs of the trees are gay with brilliant blossoms, and pendulous orchids sway in the breeze between their stems, but in September rather monotonous in color, the railway crosses and leaves the Chagres River, whose valley turns northeast far in among higher hills. The line continues to run southward, rising gently between slopes from which the wood has been lately cut away so that one can see the surrounding landscape. All around there is a sort of tossing sea of miniature mountains – I call them mountains because of their steep slopes and pointed crests, though few of them exceed a thousand feet in height. These are set so close together that hardly a dozen yards of level ground can be found between the bases of their declivities, and are disposed so irregularly that they seem as if the product of scattered outbreaks and uplifts of igneous rock. Their sides are clothed and their tops plumed with so thick a growth of wood that the eye cannot discover crags or cliffs, if any there be, and the tops of all are practically unapproachable, because no trails have yet been cut, except to one conspicuous summit. This one rises boldly to a height of about 1200 feet, and has received the name of Balboa Hill, because from it alone in this region – so one is told – can both oceans in a season of fair weather be descried. The gallant Vasco Nuñez deserves the honour of being

thus commemorated; but it is to be feared that before long the legend will have struck root among those who dwell here, and will be repeated to those who pass along the canal, that it was from this height, and not from a peak in Darien, seventy or eighty miles farther to the east, that the bold adventurer first looked out over the shining expanse of the South Sea.

We are now more than halfway to the Pacific and may pause to survey the landscape. Though there is moisture everywhere, one sees no water, for neither ocean is visible, the Chagres is hidden among the folds of the hills, and the brooks at the valley bottoms are insignificant. But otherwise it is cheerful and pleasant in its bright green and its varied lines, – a country in which a man might be content to live, faintly reminding one of the Trossachs in Scotland by the number of steep little peaks crowded together and by the profusion of wood. The luxuriance of nature is, however, far greater than in any temperate clime, and the trees have that feathery lightness which belongs to the tropics, their tops springing like green bubbles into the soft blue air.

Here, at a place called Culebra, is the highest part of the crossing from ocean to ocean, 110 feet above sea-level; and as it was here that the deepest cutting had to be made for the canal it is here that the headquarters of the engineering staff has been fixed. Of the cutting more anon. The railway follows a devious course among the hills, rattling here and there through cuttings in hard igneous rock, and in a few miles, descending gently, it passes out into a wide valley, the farther end of which, to the

south, is open, with a bold hill guarding it on the east side and several more distant rocky eminences visible far away against the horizon. The hill is Ancon, overlooking Panama city on the one side, and, on the other, the bay which the canal enters. The eminences are islands lying out in the Pacific. Being now quite down on the level of the ocean, we do not see its waters till the railway, passing along the edge of a brackish tidal swamp, reaches the city of Panama, forty-six miles from Colon.

As the Pacific side of the Isthmus is much the most picturesque part of the whole, and impresses itself most on the imagination, the visitor who desires to enjoy the scenery and grasp the configuration of land and sea, ought to climb, if he is an active walker, to the top of the hill of Ancon, on the lower slopes of which, rising just above Panama city, are the United States government offices and the villas of its officials. Steep everywhere, and in parts slippery also, is the foot-path that leads over pastures and through thickets to the top of the hill, some six hundred feet high. But it is worth while to make the ascent, for from the summit one obtains an ample prospect worthy of the historic greatness of the spot.

From this breezy height let the traveller turn his eyes first to the north, and look back over that maze of low forest-covered mountains through which he has passed from Colon and which form the watershed between the two seas. No more from this side of the Isthmus than from the other does one discern any depression in the watershed, any break in the range sufficient

to indicate that at this point there is an easy passage from the Atlantic to the Pacific. The hollows through which both railroad and canal pass are hidden deep in the folds of the hills, which stand so thick together that it is hard to believe any waterway could ever be carved out between them and impossible to tell the spot where the cutting is being made.

Very different is the view when the gaze is turned eastward along the far-winding bays and promontories of the Gulf of Panama. There the coast is for a long space flat, and a plain runs back toward distant hills. Beyond this plain other ranges rise to the southeast, bordering the Pacific till they sink below the horizon opposite the Pearl Islands. Somewhere among those ranges is the height to which Balboa climbed and whence he made the great discovery; somewhere along those shores the place where, clad in armour, he strode into the waves, and with sword drawn, took possession of the sea on behalf of the king of Spain. It is rather across that plain that any one looking from this side might fancy the lowest passage from sea to sea would be found. Yet not there, but much farther to the southeast, far behind the hills, in the Gulf of Darien, there is a point still lower, where between the Atrato River which falls into the Caribbean and the River San Juan running to the Pacific a few miles of cut would enable a ship to pass from sea to sea. Now let the traveller turn round and face to the west. His eyes will follow a long mountain chain which rises high and bold from the opposite shore of the Gulf of Panama and runs out southwest until it too is lost to

sight beneath the far horizon. In front, a group of rocky isles lies basking in the sunny sea. Just beneath the Ancon hill, at its eastern foot, the little city of Panama stands on its promontory, a mass of grey, red-roofed houses with a half-demolished Spanish fort of the eighteenth century guarding the shallow roadstead, while on the opposite side of the hill, at the base of its steep slopes, is the mouth of the Canal.

The landscape spread out under this hill of Ancon is the finest in all the Isthmian region. The northern side at Colon, although pretty with its abundant verdure, is commonplace; but here there is a view which appeals at once to the eye and to the imagination, ranging over vast stretches of land and sea, rich with varied colour, bringing together the past and the future. Over these smooth ocean plains, which the Spaniards, accustomed to their own stormy Atlantic, called the Peaceful Sea, Vasco Nuñez de Balboa looked eagerly out as he planned that expedition to Peru which the jealous cruelty of Pedrarias, the Spanish viceroy, cut short. Over them the less worthy but more fortunate Pizarro sailed to those far southern lands, where he won, in two years, an empire vaster than that which in the Old World obeyed his sovereign, Charles the Fifth. Backward and forward across these waters came the fleets that bore to the south swarms of fierce adventurers to plunder the native peoples, and that brought back the treasures which supported the European wars of Spain and helped to work her ruin. Three miles off there can be just discerned amid the trees the ancient cathedral tower of the now

ruined city of old Panama, where those fleets used to anchor till the English buccaneer Morgan sacked and destroyed the place in 1679. And just beneath, on the opposite side of the hill from these traces of the vanished colonial empire of Spain, the long mole that is to shield the mouth of the Canal is rising, and the steamships lying along the wharves, and cars standing beside them on the railway tracks, presage a commerce vaster than ever was seen in the great days of Spain, for they speak of the passage of men from all the nations along the new waterway through these forests and out over this sea to the ends of the earth. Here, as at the Straits of Gibraltar and on the Bosphorus, nature and history have joined to give delight for the eyes, and to the mind musings on the past and dim forecasting visions of the future.

Save for these few points where human dwellings are seen, – the little Spanish city below and the offices and warehouses that mark the beginnings of the new commercial port and some houses on the islets in the bay, where the inhabitants of Panama seek in summer a cooler air, – it is a lonely landscape, with scarcely a sign of life on land, and as yet few ships flecking the water. The region has always been thinly peopled and its tribes never reached the semi-civilization of the Maya peoples of Yucatan, Honduras, and Guatemala to the north of them, nor of the Chibchas of Bogota to the south. There are, anyhow, no traces of prehistoric progress here, though some have been found in Costa Rica. The aborigines were not numerous in this region, and, after the Spaniards came, were quickly reduced by the

attacks which gold-seeking adventurers made upon them. Thus one hears of but few now, except at one place, called San Blas, on the shore of the Caribbean Sea, some forty miles east of Colon. There an Indian tribe has kept itself quite apart from the white intruders, having maintained a practical independence both of Spanish viceroys and republican presidents of Colombia. These Indians are short, strong men, good sailors and fine fighters, men of the same stock that repulsed the first settlers whom Columbus planted near by on his second voyage, and so jealous of their freedom and their own ways that they will not suffer a white stranger to spend the night in one of their villages. They are reported to be still heathens, having their own medicine men, the efficiency of whom is secured by a rule which terminates the professional career together with the life of a practitioner who has lost to death seven patients in succession. These Indians come to Colon in their canoes to trade, and show themselves passably friendly to the Americans there, though less effusively so than their ancestors were to the English in those far-away days when they guided English buccaneers across the Isthmus to pounce upon their Spanish enemies at Panama. When in 1698 the Scottish colonists arrived on their ill-starred expedition to found a colony at Darien, the San Bias men welcomed them with open arms and shewed their good feeling by frequently coming on board and drinking a great deal of liquor. These kindly dispositions lasted down till our own time, for a tale goes that in one of their struggles against the Colombians they declared

themselves subjects of Queen Victoria. The Republic of Panama, having plenty of troubles of its own, wisely leaves them alone.

As there are few Indians now in the narrowest part of the Isthmus, so also there are few white people. The Spaniards never tried to settle the country, though they built towns here and there on the coast for trade. There was neither gold nor silver to attract adventurers. The land was covered with jungle, and there was a lack of native labourers to be enslaved and set to clear and till it. The jealous policy of the home government excluded the subjects of all other powers, so most of this region remained a wilderness, unimproved, and parts of it unexplored. A paved road was constructed across the Isthmus from old Panama, the town built by Pedrarias when he crossed to the Pacific side in 1520, to Nombre de Dios, which became the chief port on the Atlantic side; and along this road pack mule trains carried the silver that had come up from Peru to be shipped for Cadiz or Vigo in those great galleons for which the English seamen used to lie in wait. On the Atlantic coast there was held once a year a great fair which lasted six weeks, and to which trading folk came by sea from far and wide. Nearly all the manufactured goods which were consumed in Peru and all down the west coast were sold and bought here. Little else broke the monotonous annals of these remote provinces except the exploits of the English sea-rovers who carried on the war of Protestantism against Spain for the benefit of their own pockets. Sir Francis Drake, the least sordid and most gallant among them, began his exploits by establishing

himself in a creek on the Atlantic side of the Isthmus, and thence took Nombre de Dios with a ridiculously small force, and laid ambushes for the silver-carrying mule trains that crossed from Panama, raiding at intervals such Spanish ports as his small force enabled him to capture. In one early expedition, he climbed a tree on a hilltop, and seeing the Pacific from it, fell on his knees and prayed God to give him life till he could sail upon that sea in an English ship – a prayer which was amply fulfilled when he issued from the Straits of Magellan and ravaged the coasts of Peru in 1578. In the last of all his cruises it was in his ship off Puerto Bello that he died in 1596. Eighty years later, Morgan, the famous English buccaneer, gathered a large force of adventurers and seafaring ruffians, crossed the Isthmus by sailing in small boats up the Chagres and thence after a short land journey falling upon Panama, which he took and pillaged, bringing back his booty to the Caribbean Sea. The city was burned, whether by him or by the Spaniards remains in doubt, and thereafter it lay deserted.

Thirty years after Morgan's raid the commercial possibilities of the Isthmus fascinated a Scotsman who had more than the usual fervour and less than the usual caution of his nation. William Paterson, the founder of the Bank of England, led a colony, chiefly composed of Scottish people, and well supplied with Scottish ministers, to a place near Acla in the Gulf of Darien, on the Atlantic side of the Isthmus, one hundred miles southeast of Colon, meaning to make it a great centre of trade

over both oceans. They went out, however, imperfectly equipped and ignorant of climatic conditions. Many perished from disease; King William III gave them no support; the Spaniards at last attacked and compelled the surrender of the few who remained. Thereafter nobody disturbed the subjects of the Catholic king. New Panama, planted in a better site where the roadstead is a little deeper, although too shallow for the ocean liners of our own day, continued to enjoy a certain prosperity as the gateway to all western South America, for there was and could be no land transit through the trackless forests and rugged mountains that lie along the coast between the Isthmus and the Equator. But the decline and decay of the colonial empire of Spain under the most ill-conceived and ill-administered scheme of government that selfishness and stupidity ever combined to devise, steadily reduced the importance of the city. Nothing was done to develop the country, which remained, outside Panama and a few other ports, an unprofitable solitude. Neither did the extinction of the rule of Spain, which came quietly here because the local governor did not resist it, make any difference. Occupied with domestic broils, the new republic, first called New Granada and now Colombia, had not the capital nor the intelligence nor the energy to improve the country or develop the commercial possibilities of the Isthmus. This was a task reserved for children of the race which had produced Drake and Morgan.

Thus we come down to the events which have given Panama its present importance. In 1846 Mexico was forced to cede to the

United States, as the price of peace, the territories which now constitute the States of California, Nevada, Arizona, and New Mexico. Soon afterwards gold was discovered in California, and a great inrush of settlers followed. There was urgent need for some shorter and safer route to San Francisco than the voyage round Cape Horn or the waggon trail over plains and mountains from the Missouri. Three enterprising Americans obtained in 1848 a concession of the right to build a railway across the Isthmus. The line was opened in 1855, and had, till taken over by the United States government, paid higher dividends continuously (an average down to 1895 of about 15 per cent per annum) than any other line in the world. Being exposed to no competition, it could charge what fares it pleased. A better service of passenger steamers began to run from Panama southward as well as northward; and thenceforward, despite its deadly climate, the Isthmus became a world highway. Though the subsequent opening of railroads across the North American continent reduced the passenger traffic from the eastern United States to California via Panama, the goods or freight traffic continued; and as trade to western South America increased, so the old idea of constructing an interoceanic canal took more definite shape and led to the propounding of scheme after scheme. Finally, in 1878, the success which Ferdinand de Lesseps had achieved at Suez encouraged him to form a company in France to make a sea-level waterway through the Isthmus. This company, formed without sufficient preliminary

investigation of the conditions and the cost, collapsed in 1889, having exhausted its funds. A second one, formed in 1894 to resume and complete the enterprise, failed in its turn, after spending many millions, and in 1904 transferred all its rights and interests, together with its plans and its machinery, to the United States government, who, after about two years usefully spent in examining the problem they had to face, began in 1907 that effective work of digging and lock-building which they expect to complete in 1913. They had for some time been trying to obtain a grant from the republic of Colombia of the strip of land required for the excavation of the Canal, but could not secure terms which they thought reasonable. Then, in 1903, a revolt took place at Panama against the authority of Colombia, and the new republic of Panama, which forthwith emerged, gave to the United States a perpetual lease of a strip of ten miles wide, being the space through which the purposed canal was to run. This strip – now called the Canal Zone – is forty-five miles long, with an area of about 448 square miles. The United States Government is practically supreme in it, – though it has been held not to be a part of the United States for the purposes of the Constitution, – and rules it by a Commission under the War Department, being also owner of more than two-thirds of its surface. In return for the lease it has paid a large sum to the little republic and guaranteed its independence. With the strip it has also acquired four small islands, deemed valuable strategically, which lie a little way off the shore opposite the Pacific end of the

Canal. They are now to be fortified to protect the approach. The colonial city, with its picturesque fort looking out over the sea, its pretty little plazas planted with trees, its winding old-fashioned streets and big dark churches, stands within the Canal Zone, but is administered by its own government, being the capital of this smallest of all the South American republics. The poorer classes occupy themselves with fishing and sitting in the shade, the upper classes with politics. There is hardly any cultivated land near, but it is hoped that on the high undulating ground some miles to the west the cultivation of vegetables and fruits and whatever else passing vessels may need will presently be established.

Of the Canal itself a few words must now be said, just enough to convey some preliminary general notion of it to those who two years hence, when the time for its formal opening arrives, will be deluged with details.

It will be fifty miles in length, from deep water to deep water, though only forty from tide-end to tide-end. The minimum bottom width will be three hundred feet, the minimum depth forty-one feet, the breadth and depth being, however, for the larger part of its length, greater than these figures. Its highest point above sea-level will be eighty-five feet at the surface of the water and forty feet at the bottom, the depth at this point being forty-five feet; *i. e.* it will be cut down through the dividing ridge of the Continent to a point forty feet above the two oceans.

The simplest way to realize its character is to consider it as consisting of four sections which I will call (*a*) the Atlantic

Level, (*b*) the Lake, (*c*) the Cutting, and (*d*) the Pacific section (in two levels separated by a lock). The Atlantic Level is a straight channel, unbroken by locks, of eight miles, from deep water at the mouth of the shallow Bay of Limon, a little west of Colon, to Gatun, where it reaches the valley of the Chagres River. Now the Chagres River had always been reckoned as one of the chief difficulties in the way of making a canal. It occupied the bottom of that natural depression along which all surveyors had long ago perceived that any canal must run. But the difficulty of widening and deepening the river channel till it should become a useable canal, was a formidable one, because in the wet season the river swells to an unmanageable size under the tropical rains, sometimes rising over forty feet in twenty-four hours. This difficulty was at last met and the stream ingeniously utilized by erecting right across the course of the Chagres a stupendous dam at Gatun, which by impounding the water of the river turns its valley into a lake. This lake will have along the central channel a depth of from eighty-five to forty-five feet of water, sufficient for the largest ship. At the Gatun dam there are three locks, built of concrete, with a total rise of eighty-five feet, by which vessels will be lifted up into the lake. The lake will fill not only the valley of the Chagres itself, but the bottom of its tributary valleys to the east and west, so that it will cover 164 square miles in all, and will be dotted by many islands. The central and deepest line of this artificial piece of water, nearly twenty-four miles long, is the second of our four canal sections,

and will be the prettiest, for the banks are richly wooded. At the point called Bas Obispo, where the Chagres valley, which has been running south-southeast towards the Pacific turns away to the northeast among the hills, the line of the canal leaves the Gatun river-lake, and we enter the third section, which I have called the Cutting. Here hills are encountered, so it became necessary, in order to avoid the making of more locks, to cut deep into the central line of the continent, with its ridge of rock which connects the Cordilleras of the southern continent with the Sierras of the northern. After five miles of comparatively shallow cutting southward from the Lake, a tall and steep eminence, Gold Hill, the continental watershed, its top 665 feet high, bars the way. Through it there has been carved out a mighty gash, the "Culebra Cut," of which more anon. A little further south, eight miles from the Lake, the ground begins to fall rapidly towards the other sea, and we reach the fourth or Pacific section at a point called Pedro Miguel. Here is a lock by which the Canal is lowered thirty feet to another but much smaller artificial lake, formed by a long dam built across the valley at a spot called Miraflores, where we find two more locks, by which vessels will be lowered fifty-five feet to the level of the Pacific. Thence the Canal runs straight out into the ocean, here so shallow that a deep-water channel has been dredged out for some miles, and a great dyke or mole erected along its eastern side to keep the southerly current from silting up the harbour. From Pedro Miguel to Miraflores it is nearly two miles, and from the locks at the latter to the Pacific

eight miles, so the length of this fourth Pacific section, which, unlike the Atlantic section, is on two different levels divided by the Miraflores dam and locks, is ten miles. In it there has been comparatively little land excavation, because the ground is flat, though a great deal of dredging, both to carry a sea channel out through the shallow bay into the open Pacific, and also to provide space for vessels to lie and load or discharge without blocking the traffic.

Thus the voyager of the future, in the ten or twelve hours of his passage from ocean to ocean, will have much variety. The level light of the fiery tropic dawn will fall on the houses of Colon as he approaches it in the morning, when vessels usually arrive. When his ship has mounted the majestic staircase of the three Gatun locks from the Atlantic level, he will glide slowly and softly along the waters of a broad lake which gradually narrows toward its head, a lake enclosed by rich forests of that velvety softness one sees in the tropics, with vistas of forest-girt islets stretching far off to right and left among the hills, a welcome change from the restless Caribbean Sea which he has left. Then the mountains will close in upon him, steep slopes of grass or brushwood rising two hundred feet above him as he passes through the great Cut. From the level of the Miguel lock he will look southward down the broad vale that opens on the ocean flooded with the light of the declining sun, and see the rocky islets rising, between which in the twilight his course will lie out into the vast Pacific. At Suez the passage from sea to sea is through a dreary and monotonous

waste of shifting sand and barren clay. Here one is for a few hours in the centre of a verdant continent, floating on smooth waters, shut off from sight of the ocean behind and the ocean before, a short sweet present of tranquillity between a stormy past and a stormy future.

In these forty miles of canal (or fifty if we reckon from deep water to deep water) the two most remarkable pieces of engineering work are the gigantic dam (with its locks) at Gatun and the gigantic cutting at Culebra, each the hugest of its kind that the world has to shew. The dam is nearly a mile and a half long; its base nearly half a mile thick, and it is 400 feet wide at the water line of the lake which it will support. Each of the three locks is double, so that one of the pair can be used by vessels passing from north to south, the other by those passing from south to north. Each has a useable length of 1000 feet, a useable width of 110 feet. They are big enough in length, width, and depth for the largest vessels that were afloat in 1911. He who stands inside one of them seems, when he looks up, to be at the bottom of a rocky glen, "a canyon of cement." Nothing less than an earthquake will affect them, and though earthquakes have been destructive in Costa Rica, two hundred miles away, there is no record of any serious one here. The locks will be worked, and vessels will be towed through them, by electric power, which is to be generated by the fall of the Chagres River over the spillway which carries its water from the lake to the Atlantic.

The great Culebra Cut is interesting not only to the engineer,

but also to the geologist, as being what he calls a Section. It is the deepest open cutting anywhere in the world, and shows curious phenomena in the injection of igneous rocks, apparently very recent, among the loose sedimentary beds, chiefly clays and soft sandstones of the latest tertiary epoch. A troublesome result, partly of this intermixture, and partly of the friability and instability not only of the sedimentary strata but also of some of the volcanic rocks, has been noted in the constant slips and slides of rock and earth down the sides of the cutting into the bed of the canal that is to be. This source of expense and delay was always foreseen by those who knew the character of the soil and the power of torrential tropical rains, and was long dwelt upon as a fatal objection to a sea-level canal. It has caused even more delay and more expenditure than was expected. But it has now been overcome, though to avert the risk of future damage to the work when completed the engineers have been obliged to give a much lower slope to the sides of the cutting than was originally contemplated, so that the width of the cutting at the top is also greater than had been planned, and the quantity of material excavated has been correspondingly larger.[5] In order to lessen further washing down, the slopes will be sown with creeping grasses and other plants calculated to hold the surface soil.

---

[5] The highest point of excavation at Gold Hill is 534 feet above sea level and the highest elevation of the original surface of the ground along the centre line of the Canal was 312 feet above sea level. The vertical depth of the cut on the centre line is thus 272 feet, the bottom of the cut being 40 feet above sea level.

The interior of the Culebra Cut presented, during the period of excavation, a striking sight. Within the nine miles of the whole cutting, two hundred miles of railroad track had been laid down side by side, some on the lowest level on terraces along which the excavating shovels were at work. Within the deepest part of the cutting, whose length is less than a mile, many hundreds of railroad construction cars and many thousands of men were at work, some busy in setting dynamite charges for blasting, some clearing away the rubbish scattered round by an explosion, some working the huge moving shovels which were digging into the softer parts of the hill or were removing the material loosened by explosions, the rest working the trains of cars that were perpetually being made up and run out of the cutting at each end to dump the excavated material wherever it was needed somewhere along the line of the Canal. Every here and there one saw little puffs of steam, some from the locomotives, some where the compressed air by which power was applied to the shovels was escaping from the pipes, and condensing the vapour-saturated atmosphere.

There is something in the magnitude and the methods of this enterprise which a poet might take as his theme. Never before on our planet have so much labour, so much scientific knowledge, and so much executive skill been concentrated on a work designed to bring the nations nearer to one another and serve the interests of all mankind.

Yet a still more interesting sight is that which meets the

visitor when, emerging from the cutting, he crosses to where, behind the western hill, are the quarters of the workers,[6] with the cottages of the chief engineer and his principal assistants on the top. The chief engineer, Colonel Goethals, is the head not only of the whole scheme of construction but of the whole administration, and his energy, judgment, and power of swift decision are recognized to have been a prime factor in the progress of the work and the excellence of the administrative details. The houses, erected by the United States government, are each of them surrounded on every floor by a fine wire netting which, while freely admitting the air, excludes winged insects. All the hospitals have been netted so carefully that no insect can enter to carry out infection from a patient. Every path and every yard is scrupulously clean and neat. Not a puddle of water is left where mosquitoes can breed, for every slope and bottom has been carefully drained. Even on the grass slopes that surround the villas at Ancon there are little tile drains laid to carry off the rain. With the well-kept lawns and the gay flower-beds, the place has the air of a model village. And one sees the same in the other quarters of the employés all along the canal line, at Gatun, at Miraflores, at Ancon, where is the great hospital and where have been set up the offices of the civil government which does everything for its employés, both white

[6] The unskilled labourers employed are mostly West Indian negroes from Jamaica and Barbadoes, with some Spaniards, but no Chinese. The skilled men are from the United States. Many Chinese were here in the French days and died in great numbers.

and coloured. Nowhere perhaps in the world are workpeople so well cared for, and such ample and almost luxurious provision made for comfort and amusement as well as for health by the benevolent autocracy which presides over everything. Its success in escaping all charges of partiality or corruption, as well as in producing efficiency in the work and contentment among the workers, has indeed been such as to make some persons draw from it an argument in favour of State control of all great enterprises. To the unbiassed observer it is rather an instance of the efficiency obtainable by vesting full administrative control in men whose uprightness and capacity have already been proved beyond question, who have not risen by political methods, and who have nothing to gain by any misuse of their powers. So far as any political moral can be drawn from the case, that moral recommends not democratic collectivism but military autocracy.

In these wire nettings and drainage arrangements and hospital precautions, to which I have referred, more than in anything else is to be found the reason why, after the French effort to build the canal had twice failed, the present enterprise is succeeding. The French engineers had shown great skill and were doing their work well. No one admits their merits more fully than do, with the generous candour that belongs to true soldiers and true men of science, the American engineers who have come after them. But they had no means of fighting the yellow fever and the malaria that were frustrating all their skill and exhausting all their resources. The discovery, made while the United States troops

were occupying Cuba after the war of 1898, that yellow fever is due to the bite of the *Stegomyia* carrying infection from a patient to a healthy person, and that intermittent fevers are due to the bite of the *Anopheles*, similarly bearing poison from the sick to the sound, made it possible to enter on a campaign for the prevention of these diseases among the workers on the Isthmus. This was done before excavation began, and done so efficiently that the Isthmus is now as healthy as any part of the United States. No case of yellow fever has occurred since 1905. The mortality is no higher than in the United States army generally. In 1910 the death rate among 50,802 employés of both colours in the Canal Zone was 10.98 per thousand, in 1911, among 48,876, it was 11.02, – an extraordinarily low rate when compared with the average of European and North American cities. Among the American white employés and their families the rate was only 6.01.[7] The white employés and their families are healthy and fresh-looking, with none of that sickly brownish-yellow hue which usually marks the inhabitants of malarial districts. And I can confirm what many other visitors have told me, that one may be for days and nights on the Isthmus and neither see nor hear nor feel a mosquito. To have made one of the pest-houses of the world, a place with a reputation like that of the Pontine Marshes, or Poti on the Black Sea, or Sierra Leone itself, as

[7] Among the white population of the Zone, excluding the cities of Panama and Colon, the rate was higher, viz. 16.47 for 1910 and 15.32 for 1911, the part of the population not under official control being less careful to observe health rules.

healthy as Boston or London is an achievement of which the American medical staff, and their country for them, may well be proud; and the name of Colonel Gorgas, the head of that medical staff to whose unwearied zeal and care this achievement is largely due, deserves to stand on the roll of fame beside that of Colonel Goethals, the chief engineer and Chairman of the Commission, who has directed, and is bringing to its successful issue, this whole great enterprise.

The sanitation of the Canal Zone, following that of Havana, has done more than make possible the piercing of the Isthmus. It has opened up possibilities for the settlement by Europeans of, and for the maintenance of permanent European population in, many tropical districts hitherto deemed habitable by their natives only. To the effect of such an example one can hardly set bounds.

In no previous age could an enterprise so vast as this have been carried through; that is to say, it would have required a time so long and an expenditure so prodigious that no rational government would have attempted it. Pharaoh Necho may have, as Herodotus relates, dug a canal across the Isthmus of Suez by the labour of hundreds of thousands of his subjects accustomed to implicit obedience, but his ditch was probably a small and shallow one, and it was through a dead level of sand and clay that it was dug. Here there was a mountain to pierce and a torrent to bridle, and the locks had to provide for vessels a thousand feet long. Nothing but the new forces which scientific discovery has placed in the hands of the modern engineer –

steam, electricity, explosives of high power, machinery capable of raising and setting in their place one above another huge masses of cement – would have made the work possible. Yet even that was not enough. The French company possessed such appliances, and though their estimates of cost turned out to be based on totally inadequate data, the competence and energy of their engineers have never been questioned. And the French company failed hopelessly; and failed not merely because the work turned out heavier, and the loose strata giving way under the downpours of rain made the slides and landslips far worse, than was expected.[8] These things doubtless told against them, and much of the money raised never found its way to the Isthmus. But it was a more terrible force that foiled them. It was Pestilence, Pestilence coming on the gauzy wings of the mosquito. So little did they recognize their foe that when they built the large and commodious hospital at Ancon they provided, outside the windows, flower-boxes where stagnant water gathered and mosquitoes were hatched. Engineers died, foremen died, labourers were mown down by hundreds. Yet even if all the French capital had been properly spent and better

[8] Fascinated by the example of Suez, and not realizing how greatly the problem of construction was affected by the difference between the very wet climate of Panama and the absolutely dry climate of Suez, the French engineers originally planned a sea-level canal. To have carried out that plan would have added enormously to the cost, for the Culebra cutting must have been not only eighty feet deeper, but immensely wider. Few who examine the spot seem now to doubt that the decision to have a lock canal has been a wise one.

sanitary measures had reduced the pestilential conditions, it may be doubted whether the French company could have made a success of the undertaking. More capital would have been needed, capital which must have been raised on onerous terms, and when it had all been spent and the work completed the profits of the canal could not, after providing for working expenses, have paid interest on half of the money borrowed. Whoever looks at this prodigious work feels that it could be carried through only by a nation commanding resources so overflowing that it does not need to care how much it spends, a nation which can borrow as much money as it pleases without sensibly affecting the quotations of its existing national debt.

It is expected that the construction of the Canal will be found, when it is finished, to have cost nearly £80,000,000 ($400,000,000).[9] To this there will have to be added the cost of the fortifications it is intended to erect at Colon and on the islands that lie in the Gulf of Panama, opposite the south end of the Canal, as well as of barracks for the large garrison which is to defend it. The visitor who sees the slopes where these forts and batteries are to be placed asks who are the enemies whom it is desired to repel. Where is the great naval power that has any motive either of national enmity or of self-interest sufficient to induce it to face the risks of a war with a country so populous, so wealthy, and so vigorous as the United States? He is told that

[9] The last estimate presented puts the amount at $375,000,000. The fortifications are expected to cost about $12,000,000 more.

there is at present no such naval power, and that no quarter can be indicated whence danger will arise; but that it is possible that at some future time, from some unknown direction, some yet unconjectured enemy may arise against whose possible attacks provision ought now to be made.

When the Canal has been opened and the interest now felt in getting it completed by the appointed day has ended, hardly less keen will be the interest in that other question on which men have speculated so long. What difference will this new waterway from ocean to ocean make to world commerce and therewith also, though probably in a less degree, to world politics? And what difference, to descend to smaller matters, will it make to the West Indies, and to the ports of the Gulf of Mexico, and (not so much commercially as politically) to the neighbouring states of Central and South America? The political side of the matter is one too delicate to be discussed here, but upon the commercial one a word or two may be said.

The new route will doubtless become an important route for the traffic in heavy freight from the Atlantic ports of the United States, and from European ports also, to the ports of western North America.

It will similarly become the main freight line for goods of all kinds from both European and eastern North American ports to the west coast of South America as far south as Callao, and also from Gulf of Mexico ports as far as Coquimbo or Valparaiso. Whether the freight traffic from Europe to Valparaiso and the

other ports of Chile will be greatly affected, is deemed more doubtful. Much will, of course, depend on the tolls fixed for transit through the Canal, which, by the treaty of 1901 between Great Britain and the United States, are to be, like those at Suez, equal between all nations.

The most interesting, because the largest, and also the most doubtful and complicated, question is as to the result upon European commerce to the Far East, – Japan, China, New Zealand, and Australia. It is the most complicated, because many factors enter into it, some of them political as well as commercial. Here the Canal will compete with the Suez Canal route, and (as respects Australia in particular) with the Cape of Good Hope route, and it will also compete with the steamship lines which now ply from Australia and New Zealand to England round Cape Horn. From England to all the Australasian and east Asiatic ports, except those of New Zealand, the Suez route will be shorter than that by Panama.[10] From New York, however, the route by Panama to Sydney, Auckland (New Zealand), and Shanghai will be shorter than that via Suez, while to Hong Kong and Manila it will be of practically the same length. It is generally supposed that the Panama tolls will be lower than those now imposed at Suez. Commerce, like other things, changes more quickly in our age than it did in any previous age; yet years may elapse before the full results of the opening of the Canal

---

[10] London to Sydney via Suez 11,531 miles, via Panama 12,525; London to Auckland via Suez 12,638 miles, via Panama, 11,404.

disclose themselves. Some of the commercial as well as the political consequences which have been due to the making of the Suez Canal were altogether unforeseen. If a dozen of the most important experts were, in 1914, to write out and place in the library of the British Museum and the library of Congress their respective forecasts bearing on this subject, sealed up and not to be opened till A.D. 2000, they might make curious reading in that latter year.

The chief impressions which the scenery of the Isthmus makes on the traveller have already been indicated, – the contrast of the wildness and solitude of the region with its wonderful geographical position, which long ago seemed destined to make it a centre of commerce and population, the contrast of the advantages offered by that position with the slothful neglect of those advantages by its Spanish rulers, the contrast one sees to-day between the busy crowd of workers along this narrow line cut out from the vast forest and the untouched unpeopled nature on each side, the contrast between the black cloud of death that hung over it for four centuries and the sunshine of health and energy which medical science has now poured around it.

But the strongest impression of all is that here one sees the latest, so far as can be foreseen, of any large changes which man is likely to try to work upon the surface of the earth. Tunnels longer than any yet made may be bored through mountains or carried under arms of the sea. The courses of rivers may be diverted. Reservoirs vaster than any we know may be

constructed to irrigate arid tracts or supply electric power to cities, and bridges may be built to span straits like the Bosphorus, or railroads, like that recently opened in southern Florida, be carried through the sea along a line of reefs. But nowhere else do there remain two continents to be divided, two oceans to be connected, by a water channel cut through a mountain range.

There is a tale that when the plan for digging a canal at Panama was first mooted, Philip the Second of Spain was deterred from it by the argument, pressed by his clerical advisers, that if the Almighty had wished the seas to be joined, He would have joined them, just as, according to Herodotus, the people of Knidus were deterred by the Delphic oracle from cutting through the isthmus along which their Persian enemies could advance by land to attack them. If Zeus had wished the place to be an island, said the oracle, he would have made it one. But when an age arrived in which commercial and scientific views of nature prevailed against ecclesiastics, it became certain that here a canal would be some time or other made. Made it now has been. It is the greatest liberty Man has ever taken with Nature.

CHAPTER II
THE COAST OF PERU

The first part of the voyage from Panama down the coast towards Peru is enjoyable when made in a steamer, for the sea is smooth, the southerly breeze is usually light, and after passing through the picturesque isles that lie off Panama one sees at no great distance those Pearl Islands which at one time rivalled the isles of Bahrein in the Persian Gulf as the chief pearl fishery of the world. One wonders at the difficulties experienced by the first Spanish adventurers, Vasco Nuñez de Balboa, and after him Pizarro, in their efforts to get south, but the reason is that a strong current sets into the Gulf, and against it and the prevailing south winds it was hard for the clumsy craft of those days to make progress. But on the second morning when we had got four or five hundred miles to the south, what was our surprise to find the temperature getting lower and the sky cloudier as we approached the equator. It was chilly that evening and we asked for blankets. Dreams of a delightful basking in the soft air of a sunlit sea were dispelled! We were entering cold weather, and it was to continue with us for thousands of miles, all the way to the Straits of Magellan.

Everybody knows nowadays how largely the climate and the flora and the civilization of western Europe are due to the

Gulf Stream. But one may suspect that few people have heard of an ocean current on the other side of America equal in length and volume and scarcely less important in its influence on climate. The great Antarctic current, or Humboldt current, as it is sometimes called from the illustrious German who first scientifically observed and explained it, carries up from southern Chile to some distance north of the Equator a vast body of cold water which chills the atmosphere of the ocean and the coast and frequently covers them both with a roof of cloud. Before he crosses the Line, the traveller encounters this murky and ungenial weather, which excited the wonder of the early Spanish writers, who expected to find a zone just as torrid as they had found on the Atlantic. Seldom thereafter (during fully half the year) does he see clear blue sky, save for perhaps an hour or two each day, all the way southward as far as Valparaiso. The mists and clouds which this mass of cold water brings give the sun, the chief deity of the ancient Peruvians of the inner country, no chance on the coast, while the fogs are so frequent as to be a source of anxiety to the navigator, and the clouds so thick that the great peaks of the Andes, though at some points only fifty or sixty miles distant, can rarely be seen from the ocean.

But its cool and cloudy climate is only one of the singular features of the coast. From the Isthmus till one gets a little way south of the Equator at the Gulf of Guayaquil, the usual wet summer season of the tropics prevails and the abundant rains give to the highlands along the coast of Colombia and Ecuador

splendid forests, which will one day be a source of wealth to those countries. But at this point, or to be more precise, about the boundary of Ecuador and Peru, near the town of Tumbez where Pizarro landed, the climatic conditions suddenly change, and there begins a rainless tract which extends down the coast as far as Coquimbo in 30° S. latitude. The vaporous moisture which the southeasterly trade winds bring up from the other side of the continent is most of it spent in showers falling on the eastern side of the Andes, and what remains is absorbed by the air of the dry plateaux between the parallel chains of that range, so that hardly any passes over to the western side of the mountains. The Antarctic current, cooling the air of the warmer regions it enters, creates plenty of mists but no rain, the land being warmer than the sea. Thus so much of the coast of western South America as lies between the ocean and the Cordillera of the Andes from Tumbez nearly to Valparaiso, for a distance of some two thousand miles, is dry and sterile. This strip of land varies in width from forty to sixty miles. It is crossed here and there by small rivers fed by the snows of the Andes behind, and along their banks are oases of verdure. Otherwise the whole coast of the strip is a bare, brown, and dismally barren desert.

We had hoped before reaching the arid region to touch at the city of Guayaquil, which is the chief port and only place of commercial importance in the mountain republic of Ecuador. It had, however, been put under quarantine by Peru, owing to the appearance in it of yellow fever and the Oriental plague, so

we had to pass on without landing, as quarantine would have meant a loss of eight or ten days out of our limited time. Ecuador is not the most progressive of the South American countries, and Guayaquil enjoys the reputation of being the pest-house of the continent, rivalling for the prevalence and malignity of its malarial fevers such dens of disease as Fontesvilla on the Pungwe River in South Africa and the Guinea coast itself, and adding to these the more swift and deadly yellow fever, which has now been practically extirpated from every other part of South America except the banks of the Amazon. The city stands in a naturally unhealthy situation among swamps at the mouth of a river, but since Havana and Colon and Vera Cruz and Rio de Janeiro and even Santos, once the deadliest of the Brazilian ports, have all been purified and rendered safe, it seems to be high time that efforts should be made to improve conditions at a place whose development is so essential to the development of Ecuador itself.

Seeing far off the dim grey mountains around the Gulf of Guayaquil, but not the snowy cone of Chimborazo which towers behind them, we touched next morning at our first Peruvian port, the little town of Payta, and here got our first impression of those South American deserts with which we were to become so familiar. It is a row of huts constructed of the whitish sun-baked mud called adobe which is the usual building material in the flat country, with two or three shipping offices and stores and a railway station, for a railway runs hence up the country to the old town of Piura. A stream from the Andes gives fertility to the

long Piura valley which produces much cotton of an extremely fine quality. There are also oil wells not far off, so Payta does some business, offering as good an anchorage as there is on this part of the coast. We landed and climbed to the top of the cliffs of soft strata that rise steeply from the water, getting a wide view over the bay and to the flat-topped hills that rise fifteen miles or more inland. The sun had come out, the air was clear and fresh, and though the land was as unmitigated a bit of desert as I had ever seen, with only a few stunted, prickly, and woody stemmed plants supporting a feeble life in the hollows of the ground, still it was exhilarating to tread at last the soil of a new continent and receive a new impression.

The first view of Peru answers very little to that impression of a wealthy land called up by the name of this country, more familiar and more famous in the olden days than that of any other part of the colonial empire of Spain. Nevertheless, it is a curious fact that the wealth of Spanish Peru belonged more to her barren than to her fertile and populous regions. In the days of the Incas it was otherwise. They ruled over an agricultural people, and though they had gold in plenty, gold to them was not wealth, but material for ornaments. Apart, however, from agriculture, of which I shall speak later, the riches of Peru have consisted of three natural products, which belong to the drier tracts. These are the guano of the rainless islands off the coast, the nitrate deposits in the province of Tarapaca and the mines of silver and copper. Of these three, the guano has now been nearly exhausted, and

while it lasted it enriched, not the country, but a succession of military adventurers. The nitrate regions have been conquered by Chile and seem unlikely ever to be restored. The most productive of the silver mines were taken away when Bolivia, in which they are situated, was erected into a separate republic, and such mines as remain in the High Andes, doubtless of great and not yet fully explored value, are in the hands of foreign companies and syndicates. Little good have these bounties of nature done to the people of Peru, whether Spanish or Indian.

From Panama to Payta the direct steamers take five days, and from Payta to Callao it is two days more, so the whole voyage is about as long as that from New York to Liverpool in the quick liners. This is one of the least troubled parts of the ocean; that is to say, gales are rare, and hurricanes, like those of the Caribbean, unknown. There is, however, usually a pretty heavy swell, and when there has been a storm some two or three hundred miles out to the west, the great rollers come in and make landing along the coast no easy matter. As the ship keeps too far out for the details of the coast to be visible, the voyage is rather monotonous, especially in the cloudy weather we encountered. Here in the Antarctic current one has lost the pleasure of watching the gauzy gleam of the flying fish, but sea-birds appear circling round the ship and pelicans abound in the harbour. Whales, following the cold water northward, are seen spouting and are beset and attacked by their enemy the thresher, while whenever the ship anchors in a roadstead to discharge or take in cargo, seals and sea

lions gambolling among the waves give a little amusement. The crew were Chileans, – they are the only South Americans with a taste for the sea – the passengers mostly natives of the various republics along the coast, for these steamers furnish the only means of communication north and south, but there are usually some English commercial men and North Americans looking after their mining interests or prospecting for railways across the Andes. There is much more variety than one usually finds in an Atlantic liner, but much less than in a Mediterranean or Black Sea steamer, where on the same deck you may see the costumes and hear the tongues of seven or eight nations. The Spanish-Americans are not very communicative to strangers, but whoever speaks their language can learn a good deal from them about minerals and revolutions, – the two chief products of the northwest coast.

To sail along a coast without a chance of examining its natural beauties or the cities that stud it, is in most cases mortifying, but here in the six hundred miles between Payta and Callao one has this consolation, that there is nothing to see, and you cannot see it. The shores are brown, bare and unpeopled, while the heavy cloud roof that hangs over the sea, hides the tops of the hills also, and cuts off all view of the snowy Cordillera far behind. The towns are few and small, because the land is sterile save where one of the Andean streams gives fertility to a valley. One would naturally suppose that the country had always been even as it is now. But the ruins of ancient cities here and

there prove that it must once have been far more populous. A census taken soon after the Conquest shewed that there were in the Valley of Piura 193,000 Indians. In 1785 the inhabitants, then mostly negroes, numbered only 44,500. Of these ruins the largest are those of a city often called Chimu, from the title of the king who ruled there, near the town of Truxillo, to which Pizarro, when he founded it, gave the name of his own Estremaduran birthplace. The remains cover a wide space and shew that the people who dwelt here and in the other coast valleys must have made considerable advances toward civilization, for the pottery and other utensils are better in artistic style than any other remains found in South America. The kingdom of the Chimu was overthrown by the Incas a century before the Spanish Conquest, and nothing is known of the race except that its language, called Mochica, was quite different from that of the mountain tribes who obeyed the Incas. Whether the people perished under Spanish oppression, or whether they moved away, when in the confusion that followed the Conquest, the irrigation works that made cultivation possible were allowed to fall into decay – this is one of the many riddles of Peruvian history.

Gazing from the deck hour after hour on this dreary coast, and remembering that the Atlantic side of the Continent in the same latitude is one of the best watered and richest parts of the tropics, one is struck by the unfortunate physical conditions that make useless a region whose climate, kept so cool by the Antarctic current would otherwise have fitted it for the development of

progressive communities. Such communities did exist among the subjects of the Chimu, but being confined to a few valleys, they were not strong enough to resist the impact of the more numerous mountain tribes. Thus it was only on the plateau behind that a great nation could grow up. With a moderate rainfall these six hundred miles of coast might have been one of the most fertile parts of South America, and the history of Peru would have been altogether different. The absence of rain has provided a compensation in the form of a product which, though it cannot be used on the spot, became serviceable to other countries, and might have given Peru the means of developing mines or building railroads. The droppings of the swarms of sea-birds that frequent the rocky islands along the coast instead of being, as in other countries, washed away by showers, have accumulated till they formed those huge masses of guano which eighty years ago began to be carried away and sold to European countries as the most efficient fertilizers. The Inca sovereigns knew their value and are said to have protected the birds. Unfortunately, this easily obtained source of national wealth excited the cupidity of revolutionary leaders, each of whom fought for power because power meant the command of the revenue derivable from these deposits. Not much is now left, and the republic has been none the better for them. Some of the largest were on the Chincha Islands. The islets are all bare, some shewing bold lines and sharp peaks which remind one of those that fringe the coast of Norway about the Arctic circle.

The entrance to Callao, the port of the city of Lima, which lies seven miles inland and is five hundred feet higher, has a certain grandeur. A range of hills abuts on the sea, forming a bold cape, and opposite to it, leaving an entrance a mile or two wide, rises a lofty island, steep, bare and brown like the islands of the Red Sea, which reduces the long surges of the Pacific and gives a comparatively quiet anchorage in the spacious bay within. The town of Callao, consisting of steamship offices and warehouses and shops dealing in the things ships need, offers nothing of interest, except the remains of the fort of St. Philip, the last building where the flag of Spain floated on the mainland of the New World. So the traveller hurries by the steam railroad or the electric line up to Lima.

We came full of the expectations stirred long ago by the fame of the city Pizarro built, and in which he ruled and perished, hoping to find in it another and a still more picturesque and more truly Spanish Mexico. It was long the first city of South America, into which the silver mines poured fabulous wealth. Its Viceroy was the greatest man in the Continent, a potentate whose distant master could seldom interfere with him, for there were no telegraphs or steam vessels in those days. Nobody but the archbishop could oppose him; nor need he fear anybody but the head of the Inquisition and the head of the Jesuits. The pomp that surrounded him, the pageants with which his entrance was celebrated, were like those of a Mogul Emperor.

Lima was called by Pizarro the City of the Kings, *i. e.* the

Three Wise Men of the East, but the name it now bears, a variant from that of the river Rimac, soon prevailed. It stands in a wide flat valley, guarded by steep mountains to the north, on both banks of the broad stony bed of the Rimac, a large part of whose waters has been diverted for irrigation. Except where this river water has made cultivation possible, the plain is bare, being part of the coastal desert. The high range of hills already mentioned guards the city on the north, and runs out to the sea on the northwest. Lofty spurs of the Andes are visible to the east, but for much of the year the clouds hang so low that the hills are hardly part of the landscape and the great peaks are seldom seen.

As in most Spanish-American cities, the streets are narrow and straight, cutting one another at right angles. One is at first surprised to find the houses extremely low, many of one story and hardly any (save a few new residences on the outskirts) exceeding two stories, and to be told that they are built of bricks, or more commonly of cane and reeds plastered with mud. It is commonly said that in Lima a burglar needs nothing more than a bowl of water and a sponge to soften the plaster, and a knife to cut the canes. But the reason is apparent when one remembers that no place on the West coast has suffered more from earthquakes. Thus, except the convents and some of the older churches, everything looks modern, unsubstantial, and also unpicturesque, having little variety and little ornament in the architecture except the long wooden balcony which usually projects above the gateway. The bridge that spans the Rimac

is hardly worthy of a great capital. The shops are small and mediocre, and only in one or two thoroughfares is there any throng of passers to and fro. One notes little of the life and stir, and still less of the stateliness, that befits an ancient and famous home of power.

Yet to this mediocrity there is one exception. It is the great central square. In a Spanish, as in an Italian, city, one usually enquires first for the Square, for whatever nobleness a place has is sure to be there. The Plaza de Armas at Lima has much dignity in its ample space, and beauty in its fine proportions, in its central fountain, in the palms and flowering trees and statues which adorn it, besides a wealth of historic associations in the buildings that stand around it. Most conspicuous is the Cathedral, with its rich façade, its two quaint towers, its spacious interior, not broken, as are most of the great churches of Old Spain, by a central choir, its handsome carved choir stalls, its side chapel shrines, in one of which a glass case holds bones which tradition declares to be those of the terrible Pizarro. That pious conqueror founded the church in 1540, but earthquakes have made such havoc with the walls that what one sees now is of much later date. At the opposite corner of the Plaza are the government offices, comparatively recent buildings, low, and of no architectural interest. In the open arcade which borders them a white marble slab in the pavement marks the spot where Pizarro, cut down by the swords of his enemies, the men of Chile, made the sign of the cross with his own blood as he expired.

The passage is still shown whence the assassins emerged from a house hard by the Cathedral, where they had been drinking together to nerve themselves, and crossed the Plaza to attack him in his palace. Also on the Plaza, facing the Cathedral, is the municipal building, from the gallery of which, nearly three centuries after the Inca power had fallen under the assault of Pizarro, General San Martin, the heroic Argentine who led the revolutionary forces to the liberation of Peru, proclaimed to the crowd beneath the end of Spanish rule in South America. Of the old Palace of the Viceroys, which also fronted on the Plaza, there remains only the chapel, now desecrated and used as a storehouse for archives, whose handsome ceiling and walls, decorated with coloured tiles of the sixteenth century, carry one back to the Moorish art of Spain. Other churches there are in plenty, – seventy-two used to be enumerated, – and some of them are large and grandiose in style, but all are of the same type, and none either beautiful or imposing.

Few relics of antiquity are left in them or indeed anywhere in Lima. The library of the University, the oldest seat of learning in America, which was formerly controlled and staffed by the Society of Jesus, suffered sadly at the hands of the Chilean invaders when they took the city in the war of 1882. The old hall of the Inquisition, in which the Peruvian Senate now sits, has a beautiful ceiling of dark red cedar richly carved, a work worthy of the best days of Spain. What scenes may it not have looked down upon during the three centuries when the Holy Office

was a power at the name of which the stoutest heart in Lima trembled! And out of the many fine old mansions of colonial days one has been preserved intact, with a beautiful gallery running along its four sides of a spacious *patio* (internal court), and in front a long-windowed, richly decorated balcony, a gem of the domestic architecture of the seventeenth century, perhaps the most perfect, that earthquakes, fire, and war have permitted to survive in Spanish America. There is so little else to remember with pleasure from the days of the Viceroys and the Inquisitors that these relics of expiring artistic skill may be valued all the more.

I am forced to confess that the high expectations with which we came to Lima were scarcely realized. The environs are far less beautiful than those of Mexico, and the city itself not only much smaller, but less stately, and wearing less of the air of a capital. Our appreciation may perhaps have been dulled by the weather. We were told that the hills were pretty, but low clouds hid all but their bases from us; nor was there any sunshine to brighten the Plaza. For more than half the year, Lima has a peculiar climate. It is never cold enough to have a fire, but usually cold enough to make you wish for one. It never rains, but it is never dry; that is to say, it is not wet enough to make one hold up an umbrella, yet wet enough to soak one's clothes. September was as dark as a London November, and as damp as an Edinburgh February, for the fog was of that penetrating and wetting kind which in the east of Scotland they call a "haar." The climate being what

it is, we were the more surprised to hear what the etiquette of courtship requires from a Limeño lover. Every *novio* (admirer) is expected to shew his devotion by standing for hours together in the evening under the window of the house in which the object of his admiration lives. He may or not cheer himself during these frequently repeated performances by a guitar, but in so moist an atmosphere the guitar strings would discourse feeble music.

Despite her earthquakes, and despite her damp and murky air, which depresses the traveller who had looked for brilliant sunshine, the City of the Kings retains that light-hearted gaiety and gift for social enjoyment for which she was famous in the old days. Not even political disasters, nor revolutions more frequent than earthquakes, have dulled the edge of pleasure. There had been an attempted revolution shortly before my visit. The President, an excellent man, courageous and intelligent, had been suddenly seized by a band of insurgents, dragged through the streets, threatened with death unless he should abdicate, fired at, wounded and left for dead, until his own troops, having recovered from their surprise and found how few their assailants were, began to clear the streets of the revolutionaries, and discovered their chief under a heap of slain. The insurgent general fled over the frontier into Bolivia, where he was pointed out to me some weeks later, planning, as was believed, another descent upon Lima. Such events disturb the even tenor of Peruvian life little more than a street railway strike disturbs Philadelphia or Glasgow.

Lima retains more of an old Spanish air than do the much larger capitals of the southern republics, Argentina, Chile, and Uruguay. Its viceregal court was long the centre of the best society of the Continent. Its archbishop was the greatest ecclesiastical potentate in the Southern Hemisphere. It had a closer connection with Spain through its leading families, as well as through official channels, than any other place. Loyalty to the Spanish monarchy was strongest here. It was the last great city that held out for the Catholic King, long after all the other countries, both to the north and south, had followed the examples of revolt set by Mexico and Argentina. And it is also, with the exception of remote and isolated Bogotá, where some few Spanish families are said to have kept their European blood least touched by native immixture, the place in which the purest Castilian is spoken and the Castilian pride of birth is most cherished.

That a city so ancient and famous should not have more of the past to shew, that the aspect of streets and buildings should not be more stately, that there should be so little of that flavour of romance which charms one in Spanish cities like Seville or Avila – these things might be expected in a centre of industry or commerce, losing its antique charm, like Nürnberg or Venice, under the coarsening touch of material prosperity. But there is here no growth of industry or commerce. The Limeños are not what a North American would call either "progressive" or "aggressive." The railways and mines of Peru are mostly in

the hands of men from the United States, shipping business in the hands of Englishmen and Germans, retail trade in those of Frenchmen, Spaniards, and others from continental Europe. But the people of Lima may answer that there are more ways than one of being happy. They enjoy life in their own way, with more civil freedom, and very much more religious freedom, than under the Viceroys, and occasional revolutions – now less sanguinary than they used to be – are better than a permanent rule of inquisitors and officials sent from Spain. Some day or other Lima will be drawn into the whirlpool of modern progress. But Europe and North America are still far off, and in the meantime the inhabitants, with their pleasant, courteous manners and their enjoyment of the everyday pleasures of life, are willing enough to leave mines and commerce to the foreigner.

From Callao it is two days more on to Mollendo, over a cold, grey, tumbling sea, along a brown and cloud-shadowed coast. We had, however, changed into a much larger steamer, for at Callao begins the through ocean service all the way to Liverpool of the Pacific Steam Navigation Company. Their vessels, not so large nor so luxuriously fitted up as the Atlantic liners that ply between Europe and New York, are excellent sea boats, and commanded by careful British captains.

Next to Callao in its importance as a Peruvian port, is the little town of Mollendo, for from it starts the principal railway in the country, that called the Southern of Peru, which climbs the Andes, traverses the central plateau, and sends out branches

to Cuzco on the north, and on the southeast to the frontier of Bolivia, on the shore of Lake Titicaca. It is the main avenue to the interior of the country. Unfortunately there is at Mollendo no harbour, only an open roadstead, where vessels lie rolling and pitching in the ocean swell, which is sometimes heavy enough to make landing in boats difficult or even dangerous. A sort of breakwater has been made enclosing a tiny port, but even in its shelter, the sweep of the great billow round the rocky semicircle forces the disembarking passenger to jump hastily ashore and scurry up before the next billow overtakes him. No more dreary spot than this could be imagined. Payta in its desert was doleful enough, but Payta had sun; and this place, under a thick roof of cloud, was far more gloomy. Hills brown and barren rise steeply from the beach, leaving little room for the few houses, brown as the cliff itself. There is not a blade of grass visible, nor a drop of fresh water within many miles, save what a pipe brings from a distant river. Yet, gloomy as the place looked under the grey cloud roof which was hanging over land and sea, the inhabitants find it more tolerable at this season than such an arid and treeless land becomes when the blaze of the sun is reflected from the rocky hill face behind.

The railroad runs south for some miles between the cliffs along a stretch of sand, on which the surf booms in slow thunder, then leaves the shore and turns up into the clouds, mounting in long zigzags the steep acclivities of the mountain, and following here and there what were hardly to be called glens, but rather

waterless hollows, down which once in nine or ten years a rain storm may send a torrent. The mists grow thicker and damper as one rises, and with the cooler and damper air there begins to be a little vegetation, some flowers, most of them at this season withered, and low, thorny shrubs, such as are usually found on arid soils. Away off to the south, occasional glimpses are caught of a river valley far below, where the bright green and yellow of crops on the irrigated banks make a pleasant relief to the monotony of the brown or black slopes, up which we keep our way. Curiosity grows more intense to know what lies behind those dreary mountains. At last, after two hours of steady climbing to a height of over four thousand feet, the train reaches what seems to be the top of the range, but proves to be really the edge of a tableland, as it emerges on to level ground, it suddenly passes out of the mists into dazzling sunshine, and stops at a spot called Cachendo. We step out, and have before us a view, the like of which we had never seen before. In front, looking eastward, was a wide plain of sand and pebbles with loose piles and shattered ridges of black rock rising here and there from its surface, all shimmering in the sunlight. Beyond the plain, thirty miles away, is a long line of red and grey mountains, their sides all bare, their crags pierced by deep, dark gorges, so that they seem full of shadows. Behind these mountains again, and some fifty or sixty miles distant, three gigantic mountains stand up and close the prospect. That farthest to the south is a long line of precipices, crowned here and there by spires and towers of rock, seventeen

thousand feet in height. This is Pichu Pichu. Its faces are too steep for snow, save in the gorges that scar them here and there, but lower down, where the slopes are less abrupt, every gully is white with desert sand blown up by the winds. Next to the north is a huge purplish black cone, streaked near its top with snow beds, and lower down by lines of red or grey ash and black lava. This is El Misti, a volcano not quite extinct, for though there has been no eruption for centuries, faint curls of steam still rise from the crater. It stands quite alone, evidently of far more recent origin than the third great mass, its neighbour on the north, Chachani, which, though also of volcanic rock, has long since lost its crater, and rises in three great black pinnacles, divided by valleys filled with snow. Both it and Misti exceed nineteen thousand feet. They are not, however, the loftiest ground visible. Far, far away to the north, there tower up two white giants, Ampato, and (farther west) the still grander Coropuna, whose height, not yet absolutely determined, may exceed twenty-two thousand feet and make it the rival of Illampu in Bolivia and Aconcagua in Chile. It stands alone in a vast wilderness, a flat-topped cone at the end of a long ridge, based on mighty buttresses all deep with snow and fringed with glaciers.[11] These five mountains belong to the line of the great Western Cordillera which runs, apparently along the line of a volcanic fissure, all the way north to Ecuador and Colombia.

---

[11] Since our visit Coropuna has been ascended by my friend Professor Hiram Bingham of Yale University (U.S.A.). The average of his observations gives it a height of 21,700 feet. A very interesting account of his long and difficult snow climb may be found in *Harper's Magazine* for March, 1912.

This was our first view of the Andes, a view to which few parts of the Old World furnish anything similar, for nowhere else, except in Iceland, and in Tibet and Turkistan, do snow mountains rise out of waterless deserts. Yet this contrast was only a part of the strange weirdness of the landscape, a landscape unlike Alps or Pyrenees or Apennines, unlike the Caucasus or the Himalaya, unlike the Rocky Mountains and Sierra Nevada of North America. The foreground of wandering sand and black stones, the sense of solitude and of boundless space, a space useless to man and a solitude he can never people, the grimness of these bare walls of rock and pinnacles of untrodden snow rising out of a land with neither house nor field nor flower nor animal life, but only two lines of steel running across the desert floor, would have been terrible were it not for the exquisite richness and variety of the colours. In the foreground the black rocks and the myriad glitter of sand crystals were sharp and clear. The tints were more delicate on the red hills beyond, and the stern severity of the precipices in the far background was softened into tenderness by distance. The sunlight that burned upon these lines of iron and danced in waves of heat upon the rocks, seemed to bring out on all the nearer hills and all the distant crags varieties of hue, sometimes contrasted, sometimes blending into one another, for which one could find no names, for pink melted into lilac and violet into purple. Two months later, in the forests of Brazil, we were to see what the sun of the tropics does in stimulating an exuberant life: here we saw what beauty

he can give to sterility.

This "Pampa," or flat stretch of ground over which the railroad runs, is the first step eastward and upward from the sea on to the great inner plateau of Peru, and has a height of from four to five or six thousand feet. Its surface is generally level, yet broken by ridges and hummocks of rock, and dotted all over by mounds of fine grey or brownish sand composed of minute shining crystals. These sand hills, called *médanos*, are mostly crescent shaped, much like the moon in its first quarter, steep on the convex side, and from ten to fifteen or even twenty feet high. They drift from place to place under the south wind, which blows strongly and steadily during the heat of the day, the convex of the crescent always facing the wind. Sometimes they are swept on to and block the railway line; and when this is apprehended large stones are heaped up at the convex of the crescent and the movement is thus arrested or the sand dissipated. Such scanty vegetation as we had seen on the mist-covered hills toward the coast, has here quite disappeared under the fiery sun, – not even a cactus lifts its stiff stem. It is all sand and rocks, till the line, having run for some twenty miles across the Pampa, enters and begins to climb the second stairway of mountains to another and higher level, which forms the second terrace over which the way lies to the central plateau. The stairway is that line of red and grey mountains which were described as filling the middle distance in the view from Cachendo. Winding up through their hollows and along their faces the train enters a deep gorge or

canyon, at the bottom of which, between vertical rock walls, is seen a foaming stream, and mounts along a ledge cut out in the side of the gorge. The canyon widens a little, and at its bottom are seen bright green patches of alfalfa, cultivated with patient toil by the Indians who water them by tiny rills drawn from the stream. At last the line emerges on open and nearly level ground. One has mounted the second step and reached the second terrace or shelf of the Peruvian tableland. Here on a gently rising slope, in a grand amphitheatre, the northeastern and eastern and southeastern sides of which are formed by the three great peaks, Chachani, El Misti, and Pichu Pichu stands Arequipa, the second city in Peru.

It is built on a gentle slope, on both sides of the river Chile, a torrent descending from distant snows in a broad, shallow and stony bed, and indeed owes its existence to this river, for it was the presence of water, enabling a little oasis in the desert to be cultivated, that caught the military eye of Francisco Pizarro. Discerning the need for a Spanish stronghold between the interior tableland and the coast, he chose this spot by the river at the foot of the pass that gives the easiest access to that tableland. It had already been a rest-house station, as its Quichua name implies, on one of the Inca tracks from Cuzco to the sea, along which a service of swift Indian runners is said to have been maintained by the Incas and to have carried up fresh fish to the monarch at Cuzco. It became the seat of a bishop, was soon well stocked with churches and convents, and has ever

since held its head high, proud of its old families, and having escaped that occupation by the victorious Chilean army to which Lima succumbed. The air has the desert quality of purity and invigorating freshness. Although thin, for the height above the sea is over seven thousand feet,[12] it is not thin enough to affect the heart or lungs of most persons in ordinary health. The sun's heat is great and there is plenty of it, for here one is quite above the region of sea mists, but there is so little to do that no one needs to work in the hot hours, and for the matter of that, nobody, except the Indians, and the clerks of a few European firms, works at all. The nights are deliciously cool. Plenty of water for fields and gardens and fountains can be drawn from the river, and if the municipal authorities took pains to clean up the city by removing rubbish, and set themselves to make the outskirts neater and plant more trees, nothing would be wanting to render Arequipa, so far as externals go, a delightful place of residence. The clearness of the air has led to its being selected as the site of an astronomical observatory maintained by Harvard University for mapping out the stars of the Southern Hemisphere. Not even in Egypt or in the deserts of South Africa do the constellations shine with a more brilliant lustre. The Harvard observers placed and for a time maintained two meteorological stations on El Misti, one near the top, at a height of 19,200 feet, another at a point they called Mont Blanc (15,700 feet). Those who know how recent is the love of mountain climbing in Europe will be interested in hearing that

[12] The Harvard Observatory Report gives it as 7550.

the volcano was ascended as far back as A.D. 1677, on which occasion the crater was exorcised and sacred relics cast into it. The observers also constructed a mule path to the summit, for though the face turned to Arequipa is steep, there is no difficulty in ascending from the north by a circuitous track. There are two craters, a newer one with a diameter of 1500 feet inside a larger one, whose diameter is 2800 feet. I could find no record of any eruption of lava or ashes since the Spanish Conquest, but the vapours in the new crater, always thick, sometimes increase sufficiently to alarm the Arequipeños.

The line of perpetual snow is extremely high in this dry region, as it is in the equally dry peaks of northern Chile. On some mountains of 19,000 feet the snow disappears in summer, except in sunless hollows.

I found myself wondering whether the fascination of the city, with views out over the furrowed desert to the west, where the sun goes down into the cloud bank that hangs over the Pacific, and views up to the tall peaks that guard it to the east, would retain its power when it had grown familiar, and wondering, also, whether, through the four centuries since Europeans came to dwell here, there were many who drew delight from the marvellous nature that surrounds it, and found in the contemplation of this extraordinary scenery some relief from the monotony of life in a society so small and so isolated. The three great mountain masses that tower over the city, emblems of solid and unchanging strength in their form, are always changing

in their aspect. The snows creep down in the season of rains, and ascend again when the time of drought returns. Sunrise and sunset bring perpetual miracles of loveliness in the varying play of colours upon snow and rocks. Pichu Pichu, with its long, grey line of precipices, glows under the western sun in every tint of pink and crimson. Chachani's black pinnacles turn to a dark violet, while the snows between them redden. In the middle the broad-based cone of El Misti, with its dark lava flows and beds of brown or yellow ash, ranges from glowing orange to a purple deep as if the mountain were all colour to its core. Behind it, when twilight comes, there rises to the zenith a pale bank of pearly grey, faintly touched by the light that is dying in the west. No wonder that this solemn and majestic summit, traditions of whose outbursts of fire in days gone by still survive, has been personified and worshipped by the Indians, who, though nominally Christians, have, like other primitive races, retained a great deal of the ancient nature religion which sees spirits in all remarkable objects. The reverence for the mountain deities still lingers in secret among them, though it seldom takes form in sacrifices like those of the olden time, when, as tradition says, youths and maidens were flung into the crater to appease the wrath of the fire spirit. A Jesuit annalist relates how, in A.D. 1600, when the volcano of Omate, farther to the southeast, was in violent eruption, casting forth showers of ashes which fell round Arequipa, darkening the sky, while a glow of lurid light shone from the distant crater, the Indian wizards robed

themselves in red and offered to Omate sacrifices of sheep and fowls, beseeching the mountain not to overwhelm them. Then he adds, "These wizards told the Indians that they talked to the Devil, who told them of the approaching catastrophe, and said that Omate had asked El Misti to join him in destroying all the Spaniards. But El Misti answered that he could not help Omate, because he had been made a Christian and had received the name of San Francisco; so Omate was obliged to undertake the work alone."[13]

Built far more solidly than Lima, with house walls five or six feet thick, and lying more out of the stream of modernizing conditions, Arequipa has retained an air of antiquity, and, it may be said, of dignity, superior to that of the capital. As one looks northeastward from the lower part of the town up the rising ground, the numerous churches, with here and there a tall conventual pile, make a varied and effective skyline. The gardens on the higher northwestern bank of the river relieve the mass of houses, and the yellowish grey volcanic stone of which they are built, mellowed by the strong sun, shews well against the purple mass of Misti. There are some picturesque street vistas too, but one misses the bright colours of peasant dress which a city of Old Spain or Italy would shew. The women are largely in black. The black manta drawn over the head is absolutely prescribed for

---

[13] Quoted in the learned notes to Mr. Bandelier's valuable book, *Islands of Titicaca and Koati*, p. 161, from a MS. in the National Archives at Lima. Omate is probably the volcano now usually known as Ubinas.

church; indeed, even a European visitor is not allowed to enter a church anywhere in these countries in hat or toque; she must cover her head with the manta.

The houses are low, for here, too, earthquakes are dreaded, and the streets roughly paved with large cobblestones of hard, smooth lava. Streams of water drawn from the river run down many of them, and other streams water the fields along the outskirts. Here and there one sees a garden planted with dark green trees, which relieve the glare of light. The Plaza, less ample than that of Lima, is hardly less striking, with the great pile of the Cathedral occupying more than half of one side of it, arcades filled with shops bordering the other three sides, flowers and shrubs planted in the middle. Everything reminds one of the Asiatic or North African East, – the long, low, blank house walls which enclose the streets, walls into which few and small windows open, because the living rooms look into a central yard or *patio*; the concentration of the better sort of shops in arcades which represent the Eastern bazaar; the flat roofs on which people sit in the evenings; the deep and pungent dust; the absence of wheeled vehicles; for everybody rides, the richer on horses and the rest of the world on donkeys; the scantily dressed Indians, wild looking as Bedaween, though with reddish brown instead of yellowish brown skins. Instead of camels there are llamas, the one native beast of burden in Peru, much smaller than the camel and more handsome, but not unlike it in its large lustrous eyes, and in the poise of its long neck, with the small

erect head slightly thrown back. It resembles the camel also in its firm resolve not to move except at its own fixed pace, and to bear no load heavier than that (of one hundred pounds) to which it is accustomed. The brilliant light, too, and the dry, keen air are like the light and air of the East. But no Eastern city has around it a mountain landscape like this. One must place Tunis or Trebizond in the valley of Zermatt to get an impression of Arequipa as it stands, encircled by snow fields and majestic towers of rock.

The Oriental quality, which startles one in these Spanish-American cities of the Far West is perhaps not wholly due to the Moorish influences transmitted through their Spanish colonists. Climatic and social conditions resembling those of northern Africa and southern Spain have counted for a good deal. Sunlight and dryness prescribe certain ways of building, and the Peruvian Indian resembles the Arab or the Moor in his indifference to cleanliness and comfort. Here in Arequipa, one begins to realize that Peru is in respect of population still essentially a land of the aborigines. All the lower kinds of work are done by Indians, and the class next above is at least half Indian in blood, though not readily distinguishable from the man of Spanish stock, either in aspect or in character and manners. The negro who still abounds at Lima and Callao, though he is beginning to be absorbed into the mass of whites, is no longer seen at Arequipa, for he cannot stand this cold, thin, highland air; and even the zambo, a half-breed of Indian and negro, who is said to want the best qualities of both races, is a trifling element. Here and elsewhere in South

America it is impossible to determine the proportion of perfectly pure Spanish families to the whole population. Probably it is small, not five per cent over the whole country, but in Arequipa it may be much larger.

In one respect the city, while thoroughly Spanish, is very unlike the East. It is, and always has been, steeped in ecclesiasticism. The Cathedral is a long and handsome pile, rebuilt after the earthquake of 1868, with two towers on its south front, and an unusually spacious and unadorned interior. It contains a picture attributed to Van Dyck. There is one other church of special interest, that called the "Compañia," *i. e.* church of the Company of Jesus. Everywhere in South America the Jesuits were numerous, wealthy, and powerful till their suppression in the middle of the eighteenth century; and here, as in many Italian and Spanish towns, their churches are the most profusely decorated without and within. The north façade of this one, built of reddish grey sandstone, is a wonderfully rich and finely wrought piece of ornamentation, and the seventeenth century pictures and wood carvings of the interior are curious if not beautiful specimens of the taste of the time. There are scores of other churches and convents, far more than sufficient for a city of thirty-five thousand people. Their bells clang all day long, and clerical costumes are everywhere in the streets. What is still more remarkable, the men, as well as the women, are practising Catholics, and attend church regularly, a rare thing in most parts of Spanish America. The city was always an ecclesiastical

stronghold, and during the long War of Independence, was accounted the most conservative place in Peru. Indeed, it is so still.

But if Arequipa seems old-fashioned and conservative to-day, when a railway connecting it with the coast brings it within three days of Lima, what must it have been two centuries ago, when probably one-third of the white population consisted of priests, monks, and nuns, and the Church ruled unquestioned?

One can imagine no spot more absolutely cut off than this was from the world outside. It was an oasis like Tadmor in the wilderness. Three days' journey across desolate wastes lay between it and the coast, a coast itself scarcely inhabited, and behind towards the north and east there were only mountain solitudes, over which pastoral Indians roved. The bishop and the head of the Jesuits were the real powers, even the governor, and beneath him the alcalde, bowing to them. Nowhere in the world to-day could one find anything like that uniformity of opinion and custom which reigned in this little, remote city in those colonial days which came down into the days of Hume and Bentham in England, of Voltaire and Rousseau in France, and indeed down almost to the memory of men still living. The vision of the Holy Office in the background at Lima was hardly needed to enforce absolute submission of word and thought in such a society. The traveller of to-day marvels at the stillness and stagnation of one of the smaller cities in the interior of Old Spain. Yet a Spanish city, however small or remote, is at least

in Europe: there are other cities not far off, and men come and go. Here there were no breaks in the monotony of life, nothing but local interests of the most trivial sort to occupy men's minds. The only events were feast days and religious processions, with now and then an earthquake, and once, thirty years before the War of Independence, the terror of an Indian insurrection far up in the plateau.

Yet life was not wholly monastic. There was some learning, mostly theological. There was also a good deal of verse making: Arequipa was even famous for its poets. Upon what themes did their Muse employ itself? What sighs were there from nuns behind the convent walls? What sort of a human being was the bishop who walked in solemn processions behind chanting choristers to and from his Cathedral? Must there not have been even here the perpetual play of human passion, and could any weight of conservatism and convention extinguish the possibilities of romance? I heard from a trustworthy source a story which shews that even in grave and rigid Arequipa love would have its way and that the hearts of stately ecclesiastics could melt in pity. I tell it in my informant's words.

In old colonial days there lived in Arequipa a powerful family owning large estates and rich mines which they had inherited from their ancestors among the Conquistadores. They wielded authority both in Church and State. At the time when the incident to be described happened the heads of the family were two brothers, of whom the elder held the landed property and the

younger was bishop and ruled the Church. The elder was a widower with two children, a son and a daughter. The great convent of Nuestra Señora de los Dolores, founded and richly endowed by this family, always had one of its members as its Abbess, and at that time the only sister of these two brothers held the post. The family, being a power in Arequipa, sought to preserve their supremacy, and accordingly decided that the young daughter of the elder brother should enter the convent and eventually succeed her aunt as Abbess, while her brother should marry and inherit the estates. The girl had no vocation for a religious life and rebelled against the fate proposed for her, but the father and uncle were inexorable, and after a vain struggle she was forced to yield and take the veil. Her aunt felt sympathy for the poor child, having perhaps passed through a like experience herself, and she made the young sister's religious duties as light as possible, allowing her to lead the choir, as she possessed a fine voice, and giving her the business of the convent to attend to. Embroidery was one of the occupations of the nuns, especially fine work on linen, the designs for which were brought from Spain; and to supervise this work and to take care of it was one of the girl's chief pleasures. She always despatched it to the laundry herself and received it on its return, laying it carefully in the presses perfumed with jasmine flowers, and the laundress was the only person from the outside world (except her own family) with whom she had any communications. This laundress happened to be an alert and intelligent woman, and she gave the

nun all the news she had of the world outside the convent walls. After the young sister had been about five years in the convent the Abbess fell ill, and all the old-fashioned remedies known to the nuns failed to help her. She grew steadily worse and they were beginning to think of administering the last offices of the Church when the laundress suggested to the niece of the Abbess that the clever Scotch physician who had lately come to Arequipa should be consulted. To consult a man and a heretic horrified the nuns, but the laundress pressed her advice, and finally the bishop was appealed to and was induced, since his sister's life was at stake, to give his consent. The patient, however, even then refused to see the doctor in person, but the niece, closely veiled, was to be allowed to have an interview with him and to describe the symptoms. Although the doctor was aware that an opinion given under such circumstances was of little use, he consented to this arrangement. Accordingly, at the appointed time he presented himself at the convent gate, under the guidance of the laundress, and was taken to the antechamber of the Abbess's apartment, for a lady of such high rank as the Abbess did not occupy a cell. There the niece received him, closely veiled, and described her aunt's condition. On his asking her if she could count the pulse, she replied, "No, I have never tried." "If you will place your fingers on my wrist, I will teach you," he said. Timidly she did as he bade her, and counted the beats; and, thrilled as he was by the musical softness of her voice, it is possible that he prolonged the lesson, for at length she said, "I understand perfectly, and

will now go and count my aunt's pulse," and returned presently with a written report. During her absence the doctor had made enquiries of the laundress in regard to the Abbess's symptoms, and had decided that the old lady was suffering from cancer and had not long to live. But the young sister had made too profound an impression on him to let him give up the case at once, and he prescribed some soothing remedies and offered to return in the morning. These visits continued for several days, and at last he succeeded in seeing the sister's beautiful face and counting her pulse. The laundress could not always be in attendance, and the narcotics administered to the Abbess dulled her vigilance. Realising that his patient's days were numbered and that his work would soon be over, he saw there was no time to lose. The scruples of the young sister were finally overcome. Love won the day, and she promised to fly with her lover after the death of her aunt. With the help of the laundress he devised a plan for escape. The convent was built of stone and the sisters' cells were solidly arched like casemates, the only wood about them being the doors. Obtaining a skeleton from the hospital, the doctor took it to the house of the laundress and she conveyed it in a large linen basket to the convent the day after the funeral of the Abbess, and concealed it in the young sister's bed. That night the girl set fire to her bed, and in the confusion occasioned by the smoke and the alarm she escaped unnoticed into the street, where the laundress awaited her and took her to her house. The frightened nuns sought for her in vain, and when finally a few charred bones

were found in her cell, which they imagined in their ignorance to be hers, they mourned her as dead, and buried the bones with all the honour due to her rank and station. Meanwhile the girl herself was in great danger, for had she been discovered she would have been tried for faithlessness to her vows, and she shuddered at the bare possibility of the old punishment of being walled up alive. It was impossible to stay long in the laundress's house, and the doctor implored her to fly with him to the coast, an arduous ride of seventy miles over the desert. Recoiling from such a step, she insisted on first trying to win the pardon and protection of her relatives, and she resolved to throw herself on the mercy of her uncle, the bishop, who had always shewn her much affection and was all-powerful with the rest of the family. Accordingly, just after twilight, and wrapped in her manta, which concealed her face and figure, she stole into the bishop's palace, where she found her uncle at evening prayer, and throwing herself on her knees before him, she implored his protection. He took her at first for her own ghost (for had he not performed the funeral service over her remains?), and when he discovered that it was really she, in flesh and blood, he was horrified and put her from him as he would a viper. But as she still clung to him, telling him her story and imploring his mercy and protection, he at last listened to her, and finally said, "wait a moment," and left the room, returning shortly with a bag containing money and family jewels, emeralds, which he thrust into her hand. "Take this," he whispered, "and fly with your lover to the coast. I will see that you

are not followed." She found the doctor with horses at the city gate, and they rode away across the desert, never stopping except to change their mounts and to eat a little food, until they reached the coast, where by an extraordinary piece of luck they found an English frigate lying at anchor. Hurrying on board they told the captain their story, and he at once summoned the chaplain, who married them, and they were soon on their way to England.

Time passed, and the South American colonies became independent of Spain. Many years later, the brother of the nun went on a public mission to Europe. Before he left Peru his uncle, the bishop, told him the story of his sister's life, which had been kept secret until then, and after telling him where she was to be found (for through the Church he had watched over her), he desired her brother to communicate with her. This the nephew did in due course, and his sister was finally forgiven, and her descendants recognized and received by their Peruvian relatives. One of these descendants was seen by my informant wearing the emeralds that had been in the bishop's bag.

CHAPTER III
CUZCO AND THE LAND OF THE INCAS

None of the countries of South America, except Chile, has been demarcated by Nature from its neighbour; it is to historical events that they owe their present boundaries. This is eminently true of Peru, which is, save on her ocean side, marked off from the adjoining countries neither by river line nor by mountain line nor by desert. Her territory includes regions naturally very dissimilar, about each of which it is proper to say a few words here.

The western strip, bordering on the Andes and the Pacific, is nearly all pure desert, sterile and uninhabited, except where those river-valleys referred to in the last chapter descend to the sea. The eastern part, lying on the farther side of the Andes, and called by the people the Montaña, subsides from the mountains into an immense alluvial plain and is covered by a tropical forest, thick and trackless, unhealthy for Europeans, and inhabited, except where a few trading towns have been built on the rivers, only by Indian tribes, none of them much above savagery, and many still heathen. It is a region most of which was until lately virtually unexplored and thought not worth exploring. Within recent years, however, the demand for india rubber has

brought in the agents of various trading companies, who have established camps and stations wherever the rivers give access to the forests and send the rubber down the Amazon to be shipped to Europe and North America. The harmless and timid Indians have in some places been seized and forced to work as slaves by ruffians supplying rubber to these companies, wretches apparently of mixed Spanish and native blood, who have been emboldened by the impunity which remoteness from regular governmental control promises to perpetrate hideous cruelties upon their helpless victims. It is a country of amazing natural wealth, for the spurs of the Andean range are full of minerals; there are superb timber trees in the forests, and the soil, wherever the trees and luxuriant undergrowths have been cleared off from it, has proved extremely fertile, fit for the growth of nearly every tropical product. Eastern Peru is physically a part, and not the largest part, of an immense region which includes the easternmost districts of Colombia and Ecuador upon the north and of Bolivia on the south, as well as a still larger area in western Brazil over which the same climatic conditions prevail – great heat and great humidity producing a vegetation so prolific that it is hard for man to hold his own against the forces of nature. This is indeed the reason why these tracts have been left until now a wilderness, suffering from the superabundance of that moisture, the want of which has made a wilderness of the lands along the Pacific coast. To this region, however, and to its future I shall

return in a later chapter,[14] and mention it here only because it is politically a part, and may hereafter become the most productive part, of the Peruvian Republic. The real Peru, the Peru of the ancient Indian civilization and of the Spanish colonial Empire, is the central region which lies along the Andes between these thinly settled, far eastern forests and the barren deserts of the Pacific coast.

Central Peru is altogether a mountain land, and is accordingly called by the people "the Sierra." It is traversed by two (more or less parallel) ranges of the Andes, the eastern and the western Cordilleras, which with their spurs and their branching ridges cover a large part of its area. It includes what is called the *Puno*, a comparatively level plateau, some seventy to one hundred miles wide and enclosed by these two main lines of the Cordilleras. Between the main ranges and their branches, there lie deep valleys formed by the courses of the four or five great rivers which, flowing in a northwesterly or northeasterly direction and ultimately turning eastward, unite to form the mighty Amazon. This Sierra region is, roughly speaking, about three hundred miles long (from northwest to southeast) and one to two hundred miles wide; but of this area only a small part is fit for settled human habitation. The average height of the plateau is from ten thousand to thirteen thousand feet above sea level, and that of the region fit for pasture on the slopes and tops of the ridges from ten thousand to fourteen thousand feet – the snow line varying

[14] Chapter XVI.

from fifteen to nineteen thousand. As these slopes give pasture to llamas and alpacas and sheep, and in some favoured places to cattle, so in the less arid and less sandy tracts of the plateau there is some tillage. But the parts best suited for agriculture are to be found in the valleys, especially in so much of them as lies between ten thousand and four thousand feet above sea-level, for below five thousand feet their conditions become tropical and resemble those of the Amazonian forests. In these valleys the soil, especially where it is volcanic, is extremely fertile, but many of them are so narrow and their declivities so steep that cultivation is scarcely possible. No one accordingly who has studied the physical features of this country need be surprised to find that while the total area of Peru is about seven hundred thousand square miles, its population is estimated at only four million six hundred thousand. He may indeed be more surprised at the accounts which Spanish historians almost contemporary with the Conquest give of the far larger population, perhaps ten millions, that existed in the days of the Incas. The great falling off, if those accounts be correct, is explicable partly by the slaughter perpetrated by the first Spaniards and the oppressions practised by their successors during nearly three centuries, partly by the fact that districts near the coast which the remains of irrigation works shew to have been formerly cultivated are now sterile for want of water.

It was in the central highlands, at an altitude of from eight thousand feet and upwards that there arose such civilization as

the ancient Peruvians developed: and its origin here rather than elsewhere in South America may be mainly due to favourable climatic conditions. There was enough rain to provide grass for animals and make tillage possible, and enough warmth to enable men to live in health, yet not enough either of rain or of heat to make nature too strong for man and to enfeeble man's capacities for work.

Temperature and rainfall resembled generally those of the plateau of Mexico, a region somewhat lower, but farther from the Equator: and it was under similarly fortunate conditions of climate and agricultural possibilities that the races inhabiting those highlands had made, when Europeans arrived, some considerable advances in the arts of life. This central Peruvian area is to-day, with the exception of the irrigated banks of a few streams reaching the Pacific, the only part of the country where either an agricultural or a pastoral population can support itself. The rest of Peru depends upon its mines, chiefly of silver and copper, – a source of wealth uncertain at best. It is only in a few valleys, the most productive of which I am going to describe, that the agricultural population occupies any large continuous area. As a rule each community is confined to its own valley and cut off from the others either by mountains or by high, bare ridges on which only sheep can be kept, most of them too high and bleak even for pasture.[15]

There is no better way of conveying some notion of the

[15] *Paramo* is the name applied to these bleak regions between the valleys.

character of this central region, the true Peru, than by describing the country through which I passed by railway from Arequipa eastward to Lake Titicaca and thence northward to Cuzco, the ancient Inca capital. This railroad follows the line of the most important through route which war and commerce took in pre-Conquest times. It is the Southern Railroad of Peru, the main highway of the country. The section from Mollendo to the plateau at Juliaca was built many years ago, but the extension to Cuzco had been completed and opened less than a year before our visit. Both sections have been constructed by engineers from the United States, and the way in which the difficulties of extremely steep ascents and cuttings along precipitous slopes have been overcome reflects great credit on their skill. The gauge is the normal one. The line is owned by the Peruvian Corporation, a company registered in London, and under the energetic management of North American engineers it is doing a great deal to open up regions in which till some ten years ago there was not even a road fit for wheels. The passenger traffic is of course very small, and passenger trains run only once a day to Arequipa and thrice a week to Juliaca and Cuzco.

Quitting Arequipa on the southwestern side, the line winds up to the north and then to the east across a rugged and dreary region of rocky hill slopes, pierced by deep gorges through some of which brooks come down, fed by snow beds far above. It follows the line of a canyon, and wherever there is level ground at the bottom, some bright green strips of cultivation appear on

the margin of the stream, with a few Indian huts; so even these upper regions, cold and desolate as they are, are not so wholly desolate as the Pampa below. The view looking back over the city lying in its green oasis, with a stony desert all round, is superb. As we climb higher, the mass of Ampato and other giants of the western Cordillera deep with snow, rise in the northwest, while westward one sees beyond the reddish grey mountains through which we had mounted to Arequipa from the desert Pampa, the gleaming sands of that desert, and behind them again, just on the horizon, the long, low bank of clouds that covers the Coast Range. Here at nine or ten thousand feet, one looks over the white upper surface of these clouds. Resting on the western edge of the Pampa, they stretch far out over the Pacific and veil it from sight. Thus steadily mounting, and seeing below in a ravine the hamlet of Yura, where is a mineral spring whose pleasantly effervescent water is drunk all over Peru, the train winds round the northern flank of Chachani under its huge black precipices. Behind it and behind El Misti, which shews as a symmetrical cone on this side as well as on that turned towards Arequipa, we entered at a height of about eleven thousand feet a region typical of the Peruvian uplands. There was plenty of coarse grass, studded with alpine flowers, a few belonging to European genera. Llamas and alpacas were grazing on the slopes, herded by Indians: there were sheep, and a few cattle, and in one place we thought we caught sight among low bushes of a group of vicuñas. This is a creature like the llama, but smaller, and useless as a beast of burden, because

untameable. It roams over the hills between eleven thousand and fifteen thousand feet, and produces the finest of all the South American wools, of a delicate light brown tint, silky and soft as the fur of a chinchilla.

The scenery was strange and wild, not without a certain sombre grandeur. Below was the Chile River, the same which passes Arequipa, and to which we had returned after our circuit round Chachani. It was flowing in a deep channel which it had cut out for itself between walls of black lava: and the wide bare hollows beyond were filled with old lava streams and scattered ridges and piles of rock. To the southwest El Misti and his two mighty neighbours shut in the valley, and away to the south huge mountains, among them one conspicuous volcanic cone, were dimly seen, snowy summits mingled with the gathering clouds, for at this height rain and snow showers are frequent. The cone was probably Ubinas, the only active volcano in this neighbourhood, about sixteen thousand feet high.

Still mounting to the eastward, the line rose over gentler slopes to a broad, bleak, and wind-swept ridge where tiny rivulets welling up out of pools in the yellowish grass were flowing west to the Pacific and eastward to the inland basin of Lake Titicaca. Large white birds like wild geese were fluttering over us. Here were a few huts of the Indian shepherds near the buildings of the station; and here a cross marked the *Cumbre* or top of the pass, which is called the Crucero Alto, 14,666 feet above sea level. Higher ground cut off the view to the north and clouds obscured

the view to the east, but to the south we could discern some of the lofty summits of the western Cordillera on the watershed of which we stood. Thunderstorms were growling on both sides, and out of black clouds far in the northwest towards Coropuna came bright flashes of chain lightning. At this height the country is comparatively open and the valleys shallow, and this, along with the wonderful clearness of the air, enables the eye to range to a vast distance. This northwestern thunderstorm which we were watching was possibly a hundred miles away. We were awed by the mere vastness of the landscape, in which we looked over tracts it would take many days' journeys to traverse, and saw mountains eighteen thousand feet high separated by nameless valleys no one ever enters, with hills and rocks tumbled about in chaotic confusion, as though the work of world-shaping had here just begun. Stepping out into the bitter wind, we walked about awaiting signs of the *Soroche* or mountain sickness so much dreaded by Andean travellers, especially when they come straight up from the coast to this vast height, as high as the Matterhorn or the highest peaks of the Rocky Mountains. The air was very cold and very thin, seeming not to fill the lungs. But nothing happened.

From the Crucero Alto the railway descends rapidly for two thousand feet past two large lakes, embosomed in steep green hills – they reminded me of Loch Garve in Ross-shire – till it reaches a wide, bare, desolate flat, evidently part of the former bed of Lake Titicaca, which was once far larger than it is to-

day. Here we were in that central plateau which the people call the *Puno* and which surrounds the lake, its lower part cultivated and peopled. At the large village of Juliaca, whence a branch line runs to the port of Puno on the lake farther to the southeast, the main line turns off to the north, still over the flat land which, where not too marshy, is under tillage. The inhabitants were all Indians, and only at Tirapata, which is a point of supply for the mines on the eastern slope of the mountains, were white people to be seen. Far to the northeast, perhaps one hundred miles away, could be discerned a serrated line of snowy mountains, part of the eastern Cordillera which divides the Titicaca basin from the Amazonian valleys. At last the hills begin to close in and the plain becomes a valley, narrowing as we travel farther north till, at a sharp bend in the valley which opens out a new landscape, we pass under a rock tower sixteen thousand feet high, like one of the aiguilles of Mont Blanc immensely magnified, and see in front of us a magnificent mountain mass streaming with glaciers. Two great peaks of from eighteen thousand to nineteen thousand feet are visible on this side, the easternmost one a long snow ridge resembling the Lyskamm above Zermatt; and behind it there appears a still loftier one which may approach or exceed twenty thousand feet. This is the Sierra of Vilcanota, the central knot of the mountain system of Peru, as in it branches of the western inosculate with those of the eastern Cordillera. Though very steep, the highest peaks seemed to me, surveying them from a distance of fifteen or twenty miles, to offer no great

difficulties to an active and experienced climber, apart of course from the rarity of the air at this immense height, a difficulty which, while negligible by many, is serious to some otherwise excellent mountaineers. The fact that the railroad passes close to these splendid summits gives unusual facilities for an assault on them, since the transportation of warm night coverings and of food is one of the chief difficulties in a cold and thinly peopled region. As none of the tops seems to have been yet scaled, they deserve the attention of aspiring alpinists.

Above the village of Santa Rosa the valley is uninhabited, a deep, grassy hollow between the Vilcanota group of peaks on the east and a lower though lofty range on the west, with piles of stones at intervals, and now and then we met or passed a string of llamas carrying their loads, for the railway has not wholly superseded the ancient modes of transportation.

Just at the very highest point of the col or pass of La Raya 14,518 feet above sea-level, in which the valley ends, the westernmost of these Vilcanota peaks is visible on the east behind a deep gorge, the upper part of which is filled by a glacier. From this glacier there descends a torrent which on the level top of the pass spreads out into a small shallow marsh or lake which the Peruvians held sacred as the source of the sacred river Vilcamayu: and from this lake the water flows partly south into Lake Titicaca, partly north into the Amazon and the Atlantic. Here indeed we were looking upon one of the chief sources of that gigantic stream, for of all the rivers that join to make

the Amazon this is among the longest. During its course till it meets the river Marañon, it is called first Vilcamayu, then Urubamba, and finally Ucayali. The pass itself, a broad smooth saddle not unlike, if one may compare great things with small, the glen and watershed between Dalnaspidal and Dalwhinnie which marks the summit level of the Highland Railway in Scotland, has no small historic interest, for it has been a highway for armies as well as for commerce from the remotest times. The ancient track from Cuzco to the southern boundary of the Inca empire in Chile passed over it. By it the Spanish Conquistadores went backward and forward in their campaign of subjugation and in the fierce struggles among themselves which followed, nor was it less important in the War of Independence a century ago. Till the railway was recently opened, thousands of llamas bearing goods traversed it every year. What one now sees is nothing more than a fairly well-beaten mule track, and I could neither discern any traces nor learn that traces have been discovered either of the wall which the Inca rulers are said to have built across it as a defence from the Collao tribes to the south, or of the paved road which, as the old writers say, they constructed to connect Cuzco with the southern provinces.

Were such a spot in Switzerland or Tyrol, its lonely beauty would be broken by a summer hotel for health-seeking tourists; nor could one imagine a keener and more delicious air than this, though people with weak hearts might find it trying. As soon as we had got a little way down from the top, the lungs began

to feel easier, for the denser and warmer air of its lower levels comes up on the northerly wind which we met in descending. The valley, still smooth and grassy, sinks rapidly and in an hour or two we had entered a climate quite different from that of the Titicaca plateau to the south. After some six or eight miles a place is reached called Aguas Calientes (Hot Waters), from the numerous mineral springs which bubble up close together from the ground, most of them too hot to taste, and all impregnated with iron and sulphur. They are said to be valuable in various maladies, and in France or Switzerland an Établissement des Bains would doubtless have arisen to enclose and exploit them. As it is, the only sign that they are used is a wooden hut erected over one of the springs in which the station master cures himself of rheumatism. There are only two houses besides the station, but on the hill above mines of copper and antimony are worked by Indian labour.

Below this point the floor of the valley falls again. It is still narrow, but the now warmer climate permits tillage, and the patient toil of the Indians, turning every bit of ground to account, cultivates fields of grain and potatoes sloping at an angle so steep that ploughing or hoeing seems almost impossible. When one asks how this happens, the answer is that the rapacity of lawyers, ousting the Indian from the better lands below, drives him to these less productive slopes. The hillsides are extraordinarily bare, but as fruit trees appear round the cottages, this may be due not to the altitude, but to the cutting down during many centuries

of all other trees for fuel. Never have I seen an inhabited region – and in the case of this particular valley, a thickly inhabited region – so absolutely devoid of wood as is Peru. Even in Inca days, timber seems to have been very scarce. There is plenty to be had from the tropical forests lower down, but the cost of carrying logs up from them upon mule-back is practically prohibitive. A good, solid plank would be a load too heavy for a llama.

Twenty miles below the pass of La Raya is the town of Sicuani, which we were fortunate enough to see on the market day – Sunday – when the Indians from many miles round come to sell and buy and enjoy themselves. It is a good type of the well-to-do Peruvian village, the surrounding country being fertile and populous. The better houses, a few of them two storied, are of stone, the rest of sun-dried mud – that *adobe* which one finds all over Spanish America from the pueblos of New Mexico down to Patagonia. Their fronts are covered with a wash of white or light blue, and this, with the red-tiled roofs, gives a pleasant freshness and warmth of tone. The two plazas whose joint area is about equal to half of the whole town, are thronged with Indians, all the men and many of the women wearing the characteristic poncho, a rough woollen or, less often, cotton cloak which comes below the waist, and is usually of some bright hue. To this the women add gaudy petticoats, red or purplish, blue or green or violet, so that there is even more colour in the crowd than on the houses. The greatest variety is in the hats. The women wear round felts or cloth-covered straws, some almost as wide as a cardinal's; many

are square, set off by gilt or silvered bands like the academic cap of the English Universities, though the brim is larger. The man's hat is smaller; it is mostly of stiff white felt, and underneath it is a tight fitting cloth cap of some bright colour, usually red, with flaps at each side to protect the ear and cheek from the piercing winds. Strings of glittering beads complete the Sunday dress of the women, and we saw only a few with silver ornaments. Most of the trading seemed to be done by barter, country folk exchanging farm or garden produce with the town dealers for groceries or cloth. The cotton cloths were largely made from the Peruvian plant cultivated in the warm coast valleys, while some of the woollen goods, such as blankets or stuff for petticoats, had come from England, as I saw on them the names of Yorkshire firms. Besides maize and nuts and peppers, together with oranges carried up from the hot valley of Urubamba seventy miles to the north, the most noticeable articles of commerce were a sort of edible seaweed brought from the coast, and dried marine star-fishes, and, above all, small bags of coca leaves, the article which is the one indispensable stimulant of the Indian, more for him than tea or coffee or alcoholic drinks are for the Asiatic or the European. It is a subtropical shrub or low tree which grows on the lower slopes of the Peruvian and Bolivian Andes and is sold to the Indians in small quantities, as indeed all the sales and purchases seemed to be on a small scale, there being among the peasants very little money though very little downright poverty. South American countries are, for the traveller at least, a land of

high prices, but here we saw savoury messes of hot stewed meat with chopped onions and potatoes and a small glass of chicha (the common drink of the country brewed from maize), thrown in, offered at the price of five centavos, less than two English pence or a United States five cent piece. It was surprising that in so thick and busy a crowd there should be, instead of the chattering and clattering that one would have heard in Europe, only a steady hum. The Quichua Indians are a comparatively silent race, quiet and well mannered, and inoffensive except when they are drunk. These Sicuani people were small in stature, few exceeding five feet six inches, their faces a reddish brown, the features regular though seldom handsome, for while the nose is often well formed, the mouth is ugly, with no fineness of line in the lips, although these are far less thick than a negro's. Some have a slight moustache, but beards are seen only on the mestizos (half breeds). Among the many diversities of feature which suggest that there has been an intermixture of races, perhaps long ago, there are two prevailing types – the broad, round, short face with full cheeks, and the longer face with an aquiline nose. All have dark brown or black eyes, and long, straight, black, rather coarse, hair, and in all there is a curiously stolid and impassive look as of men accustomed to centuries of monotony and submission. Impassiveness is the characteristic note of the Indian. The Kafir is like a grown-up child; the Chinese have a curious quiet alertness and keenness of observation; the Hindus (and most Orientals) are submissive though watchful as if trying

to take the white man's measure: but the Indian is none of these things. In his obedience there is no servility: he is reserved, aloof, seemingly indifferent to the *Viracocha*[16] and to things in general. The most noticeable in the throng were the Indian village alcaldes, each carrying as the badge of his office a long, heavy staff or cane, with a spike at the bottom and a large round head, bound with silver bands and covered at the top with a silver casing. This dignitary, appointed by the local authority annually, exerts in his little community an undisputed sway, enforced by his power of imprisonment. The post is eagerly sought, so that the wealthier sort will offer money to obtain it. We saw them moving through the crowd, all making way for them. There were, however, no disturbances to quell: the bright sun shone on an orderly and good-humoured crowd. Some groups, drawn a little apart, were enjoying the strains of a guitar or an accordion or those of the true national instrument, the Pandean pipe made of hollow reeds unequal in length, while above, on the hillside, the donkeys on which the wealthier peasants had ridden in and the llamas that had carried their produce stood patiently awaiting the declining light that should turn them homeward.

The only point of interest in Sicuani is the church and the arched gateway beside it. It is like any other village church, the architecture dull, the interior gloomy. But it was in this church

[16] This is the term of respect by which an Indian usually addresses a white man of superior station. The word was in Inca mythology the name of a divine or half-divine hero – it was also the name of one of the Inca sovereigns.

that in 1782 Andres the nephew of Tupac Amaru, half of Spanish Biscayan, half of Inca blood, received episcopal absolution for his share in the great insurrection of the Indians under that chieftain, an absolution to be shortly followed by his murder at the hands of perfidious Spaniards; and it was on this arch (if the story we heard be true) that some of the limbs of the unfortunate Tupac Amaru himself were exposed after he had been torn in pieces by four horses in the great square of Cuzco.

The valley of the Vilcamayu River below Sicuani unfolds scene after scene of varied beauty. It is indeed even more bare of wood than those valleys of the central Apennines, of which, allowing for the difference of scale, it sometimes reminds one. The only tall tree is the Australian Eucalyptus, which though only recently introduced, is now common in the subtropical parts of South America, and already makes a figure in the landscape, for it is a fast grower. These Australian gum trees have now overspread the world. They are all over South Africa and on the Mediterranean coasts, as well as in Mexico and on the Nilghiri hills of southern India, where they have replaced the more beautiful native groves.

In the wider and more level stretches of the valley, populous villages lie near together, for the irrigated flats of the valley floor flourish with abundant crops, and the rich red soil makes the hillsides worth cultivating even without irrigation. Although stained by the blood of battles more than is any other part of Peru, the land has an air of peace and comfort. The mountains

on each side seemed to be composed of igneous rocks, but only in one place could I discover evidences of recent volcanic action. About fifteen miles below Sicuani six or seven small craters are seen near together, most of them on the northeast side of the valley, the highest some twelve hundred feet above it; and the lava flows which have issued from two or three of these are so fresh, the surface still so rugged and of so deep a black, that one may conclude that not many centuries have elapsed since the last eruption. The higher ranges that enclose the valley, crags above and curving lines of singular beauty below, evidently belong to a more remote geological age. Their contrasts of dark rock and red soil, with the flat smiling valley between and the noble snowpeaks of the Vilcanota group filling the southern distance, make landscapes comparable in their warmth of colour and variety of form to those of the Italian Alps. They are doubly delightful to the traveller who has been passing through the savage solitudes that lie between this and the Pacific coast. Here at last he seems to get a notion of what Peru may have been like before the invaders came, and when a peaceful and industrious people laboured in the service of the Inca and the Sun God. Now, to be sure, there is a railway, and the station houses are roofed with corrugated iron. Yet the aspect of the land can have changed but little. The inhabitants are almost all Indian, and live and cultivate much as they did four centuries ago; their villages are of the same mud-built, grass-roofed cottages. They walk behind their llamas along the track, playing a rustic pipe as they go; and

the women wash clothes in the brook swollen by last night's rain; and up the side glens which descend from the untrodden snowy range behind, one catches glimpses of high, steep pastures, where perhaps hardly even a plundering Spaniard ever set his foot and where no extortionate curate preyed upon his flock.

Swinging down the long canyon of the Vilcamayu – it is long, indeed, for there are four hundred miles more of it before it opens on the great Amazonian plain – and rattling through deep rock cuttings and round sharp curves above the foaming torrent, the line at last turns suddenly to the northwest towards Cuzco, and we bid farewell to the river. Gladly would we have followed it down the valley into scenery even more beautiful than that of its upper levels, where luxuriant forests along the stream contrast with the snowy summits of the Eastern Cordillera towering above. But from this point on there are only mule paths, and travel is so slow that a week would have been needed to reach the finest part of this scenery.[17] Renunciation is the hardest part of travelling.

Our way to Cuzco lay up a wide lateral valley, enclosed by green hills, well cultivated and studded with populous villages, near one of which can be descried the ruins of a large ancient building which tradition attributes to the Inca Viracocha. The vale has an air of peace and primitive quiet, secluded and remote, as of a peaceful land where nothing had ever happened. At last, as

---

[17] Above this valley, nearly a hundred miles away to the northeast, rises the splendid peak of Salcantay, whose height, said to approach 22,000 feet, will some day attract an aspiring mountain climber.

the mountains begin to close in, the end of the journey comes in sight; and here, under steep hills enclosing a basin-shaped hollow – what in Peru is called a *Bolson*– lies Cuzco, the sacred City of the Sun.

Cuzco belongs to that class of historic cities which have once been capitals of kingdoms and retain traces of their ancient glory, a class which includes Moscow and Krakau, Throndhjem and Upsala, Dublin and Edinburgh and Winchester, Aix la Chapelle and Bagdad and Toledo and Granada, a class from which imperial Delhi has now just emerged to recover its former rank. And Cuzco was the capital of an empire vaster than was ruled from any of those famous seats of power, the centre of a religion and a dominion which stretched southward from the Equator for two thousand miles and embraced nearly all that there was of whatever approached civilization in the South American Continent.

Every traveller is familiar with the experience of finding that the reality of some spot on which his imagination has dwelt is unlike what it had pictured. I had fancied a walled city visible from afar on a high plain, with a solitary citadel hill towering above it. But Cuzco lies inconspicuous, with its houses huddled close in its *bolson* at a point where three narrow glens descend from the tableland above, their torrents meeting in it or just below it; and no buildings are seen, except a few square church towers, till you are at its gates. It stands on a gentle slope, the streets straight, except where the course of a torrent forces them to

curve, and many of them too narrow for vehicles to pass one another, but vehicles are so few that this does not matter. They are paved with cobblestones so large and rough that the bed of many a mountain brook is smoother, and in the middle there is an open gutter into which every kind of filth is thrown, so that the city from end to end is filled with smells too horrible for description. Cologne, as Coleridge described it a century ago, and the most fetid cities of Southern Italy are fragrant in comparison. The houses, solidly built of stone, are enclosed in small, square court yards surrounded by rude wooden galleries. Many have two stories, with balconies also of wood in front, and a few shew handsome gateways, with the arms of some Spanish family carved on the lintel stone. One such bears the effigies of the four Pizarro brothers, and is supposed to have been inhabited by the terrible Francisco himself when he lived here. But the impressive features of the city are its squares. The great Plaza, a part of the immense open space which occupied the centre of the ancient Inca town, wants the trees and flower beds of the squares of Lima and Arequipa. But its ample proportions, with three remarkable churches occupying two sides of it, and the fortress hill of Sacsahuaman frowning over it, give it an air of dignity. The two smaller plazas, that called Cusipata and that of San Francisco, are less regular, but rudely picturesque, with arcades on two sides of them, and quaint old houses of varying heights, painted in blue, and bearing in front balconies frail with age. The older Spanish colonial towns, inferior as they are in refinements

of architectural detail to the ancient cities of Italy and Spain, have nevertheless for us a certain charm of strangeness, intensified, in the case of Cuzco, by the sense of all the changes they have witnessed.

The cathedral, if not beautiful, is stately, with its two solid towers and its spacious and solemn interior. One is shewn a picture attributed to Van Dyck – be it his or not it is a good picture – and an altar at which Pizarro communicated, and a curious painting representing ceremonies observed on the admission of monks and nuns in the seventeenth century. But what interested me most was a portrait in the sacristy, among those of other bishops of Cuzco, of the first bishop, Fray Vicente de Valverde. It may be merely a "stock" picture, made to order at a later time like those of the early Popes in the basilica of St. Paul at Rome. But one willingly supposed it taken from the life, because the hard, square face with pitiless eyes answered to the character of the man, one of the most remarkable persons in the history of the Spanish Conquest, because he is as perfect an illustration as history presents of a minister of Christ in whom every lineament of Christian character, except devotion to his faith, had been effaced.[18] He was the friar who accompanied Pizarro on his expedition and stood by the leader's side in the square at Caxamarca when he was welcoming as a friend the Inca Atahuallpa. When Atahuallpa declined the summons of

---

[18] It is fair to say that when the conquest was once accomplished, Valverde seems to have protested against the reduction of the Indians to slavery.

Valverde to accept baptism and recognize Charles the Fifth as sovereign, Pizarro, whose men were fully armed, and had already been instructed to seize the unsuspecting Inca and massacre his followers, hesitated or affected for a moment to hesitate, and turned to Valverde for advice. "I absolve you," answered the friar. "Fall on, Castilians, I absolve you." With this the slaughter of the astonished crowd began: and thousands perished in the city square before night descended on the butchery.

When Cuzco was taken, Valverde was made bishop of the new see, the first bishopric of Peru. Verily he had his reward. He did not long enjoy it. A few years later he was shipwrecked, while voyaging to Panama, on the coast near Tumbez, captured by the wild Indians of those parts, and (according to the story) devoured.

Of the other churches, the most externally handsome is that of the Compañia (the Jesuits), with its florid north façade of red sandstone, a piece of cunningly conceived and finely executed ornamentation superior even to that of the church of the same Order at Arequipa. Internally there is most to admire in the church of Merced (Our Lady of Mercy, the patroness of Peru), for it has richly decorated ceilings on both stories of its charming cloisters, and a fine staircase leading up to the choir. All the larger churches have silver altars, some of them very well chiselled. But by far the most remarkable piece of work in the city is the pulpit of the old and now scarcely used church of San Blas. It is said to be all of one piece, the glory of an Indian

craftsman, and is a marvel of delicate carving, worthy of the best executive skill of Italy or Spain. My scanty knowledge does not qualify me to express an opinion, but it was hard not to fancy that in this pulpit and in the fine ornamentation of the façades of the Jesuit churches I have described, there may be discovered marks of a distinctive type of artistic invention which was not Spanish, but rather Peruvian, and gave evidence of a gift which might, if cultivated, have reflected credit upon the Indian race.

It has seemed worth while to dwell upon the ecclesiastical buildings of these three Peruvian cities just because there is so very little to attract the student of art in South America, less even than in Mexico. Though the two greatest Spanish painters lived after the days of Pizarro, one may say, broadly speaking, that the best days of Spanish architecture and of taste in works of art were passing away before these American countries were settled, and it was seldom that anything of high excellence was either brought from Europe or produced in South America, produced even in Peru, the wealthiest of all the colonial dominions of Spain.

Before I turn from Spanish Cuzco to the ancient city a word may be said as to its merits as a place of residence. Its height (11,100 feet) and its latitude give it a climate free from extremes of heat or cold, and, for those who have capacious lungs and sound hearts, pretty healthful throughout the year. We found the air cool and bracing in the end of September. Disgusting as are the dirt and the smells, they do not seem to breed much disease; foul gases are probably less noxious when discharged

into the open air than when they ooze out into houses from closed drains.[19] The country round is beautiful, bold heights surrounding a green and fertile vale, though there are so few trees that shade is wanting. Many places of great antiquarian interest are within reach, of course accessible by riding only, for there is only one tolerable road, that which leads down the valley to the Vilcamayu. Society, though small and old-fashioned, unfriendly to new ideas and tinged with ecclesiasticism, is simple mannered and kindly. No people can be more polite and agreeable than the Peruvians, whether of pure Spanish extraction, or mixed, as the great majority here are, with Indian blood. Though Cuzco is deemed, not less than Arequipa, a stronghold of conservatism and clericalism, modern tendencies can make themselves felt. Shortly before my visit there had been a revolt of the students of the University against a rector deemed "unprogressive": and there had been chosen as his successor a young North American professor who had been living in Peru for a few years only, employed in some government work when he was appointed here. He seemed to be on good terms with both officials and pupils.

The university is an old one, founded in 1598, but its revenues and the attendance of students are not worthy of its antiquity. Those who come seek instruction in professional subjects, especially law and medicine. Nearly everywhere in

---

[19] While these pages are passing through the press (April, 1912), I am informed that a serious effort is about to be made to lay drains in and generally to clean up Cuzco.

South America the demand for teaching in philosophy, letters, or science is scanty indeed. The clergy, it need hardly be said, are not educated in these lay institutions.

Though essentially a Spanish city in its edifices, Cuzco is predominantly Indian in its people. The Quichua language is that commonly spoken, and it is the Indian aborigines who give to the aspect of its streets and squares the picturesqueness which half atones for squalor. They set up their little booths, sometimes covered with canvas, along the arcades and in the plazas, and loaf about in their bright-coloured ponchos and broad, flat, straw hats, the dry-weather side of the straw covered with a sort of velveteen adorned with tinsel, and the wet-weather side with red flannel. Women lean over the rough wooden balconies on the first floors of the houses, and talk to the loungers in the plaza below. Strings of llamas bearing their burdens pass along, the only creatures, besides the tiny mules, who do any work. There are scarcely any wheeled vehicles, for those not forced by poverty to walk, ride mostly on donkeys; and the only events are saints' days, with their processions, occurring so frequently that the habit of laziness has unequalled opportunities for confirming itself. Though the Quichuas were under the Incas a most industrious race, and still give assiduous labour to their fields, the atmosphere of the city is one of easy idleness, nothing to do, and plenty of time to do it. The only manufactory we came across was a German brewery, – there is no place, however remote, where one does not find the enterprising German. Neither is there any trade, except that of

supplying a few cheap goods to the surrounding country folk. By far the best general warehouse is kept by an Italian gentleman who has got together an interesting collection of antiquities.

Now let us turn from the Cuzco of the last three and a half centuries back to the olden time and see what remains of the ancient city of the Sun and of the Incas, his children. It is worth while to do so, for here, more than anywhere else in South America, there is something that helps the traveller to recall a society and a religion so unlike the present that it seems half mythic. Whoever has read, as most of us did in our boyhood, of the marvels of the Peruvian Empire which Pizarro destroyed, brings an ardent curiosity to the central seat of that Empire, and expects to find many a monument of its glories.

The reality is disappointing, yet it is impressive. One learns more from a little seeing than from reading many books. As our expectations had been unduly raised, it is right to give this reality with some little exactness of detail. The interest of the remains lies entirely in what they tell us about their builders, for there is nothing beautiful, nothing truly artistic to describe. The traces of the Incas[20] to be seen in Cuzco, and, indeed, anywhere in Peru, are all of one kind only. They are Walls. No statue, no painting. No remains of a complete roofed building, either

---

[20] The name "Inca" properly belongs to the ruling family or clan in the Peruvian monarchy, of whose ethnic relations to its subjects we know very little, but I use it here to denote not only the dynasty, but the epoch of their rule, which apparently covered two centuries (possibly more) before the arrival of Pizarro. The expression "The Inca" means the reigning monarch.

temple or palace; nothing but ruins, and mostly fragmentary ruins. The besom of Spanish destruction swept clean. Everything connected with the old religion had to perish: priests and friars took care of that. As for other buildings, it did not occur to anybody to spare them. Even in Italy, not long before Pizarro's day, a man so cultivated as Pope Julius the Second knocked about the incomparably more beautiful and remarkable buildings of ancient Rome when they interfered with his plans of building.

But the walls at Cuzco are remarkable. They are unique memorials, not only of power and persistence, but in a certain way of skill also, not in decorative art, for of that there is scarcely a trace left, but of a high degree of expertness in the cutting and fitting together of enormous blocks. Most of the streets of the modern city follow the lines of ancient pre-Conquest streets, and in many of these there are long stretches of wall from six or eight to sixteen or eighteen feet in height so entirely unlike Spanish buildings that their Inca origin is unquestionable. They are of various types, each of which probably belongs to an epoch of its own. The most frequent, and apparently the latest type, shews very large blocks of a dark grey rock, a syenite or trachyte, cut to a uniform rectangular oblong form, the outer faces, which are nearly smooth and slightly convex, being cut in towards the joinings of the other stones. The blocks are fitted together with the utmost care, so close to one another that it is no exaggeration to say that a knife can seldom be inserted between them. The walls which they make slope very slightly backward, and, in

most cases, the stones are smaller in the upper layers than in the lower. Two such walls enclose a long and narrow street which runs southeastward from the great Plaza. They are in perfect preservation, and sustain in some places the weight of modern houses built upon them. There are very few apertures for doors or windows, but one high gateway furnishes a good specimen of the Inca door and is surmounted by a long slab on which are carved in relief, quite rudely, the figures of two serpents. In other places one finds walls of the same character, but with smaller blocks and less perfect workmanship. Of a third type the wall of the so-called Palace of the Inca Roca is the best instance. It is what we call in Europe a Cyclopean building, the blocks enormous and of various shapes, but each carefully cut and adjusted to the inequalities of outline in the adjoining blocks, so that all fit perfectly together. One famous stone shews twelve angles into which the stones above, below, and at each side of it have been made to fit. This type seems older, perhaps by centuries, than that first described. In none of the walls is any mortar or any other kind of cementing material used: their strength consists in their weight and in the exactness with which they are compacted together. The most beautifully finished piece of all is to be seen in the remains of the great Temple of the Sun on whose site and out of whose ruins have been built the church and convent of St. Dominick. Here, at the west end of the church, there is what was evidently the external wall of the end of the temple. It is rounded, and each of the large squared stones is so cut as to conform

perfectly to the curve of the whole. None of the single stones has the convexity which appears in the walls first described, because the surfaces of all have been levelled and polished so that they form one uniformly smooth and uniformly curved surface, as if they were all one block. A more exquisitely finished piece of work cannot be imagined. It is at least as good as anything of the same kind in Egypt, and stands as perfect now as it was when the Spaniards destroyed the superstructure of the temple.

The city is full of these fragments of wall. I discovered in out-of-the-way corners some that were supporting little terraced garden beds, others in backyards, or even in pigsties, and it seemed to me that there were four or five distinct styles or types of stone cutting and stone fitting, belonging to different ages.[21] If all the buildings erected since 1540 could be removed without disturbing the older buildings beneath them, that which was left would be sufficient to give a fairly complete ground plan of the Inca city and enable us to form some idea of its character. But we should not then be much nearer to knowing what was the actual aspect of the great palaces and temples before the work of destruction began. The Incas built immense covered halls, we are told of one two hundred paces long by fifty wide, but it does not appear how they were roofed over, for the arch was, of course, unknown. Apparently there was little or nothing of that advanced

[21] A patient archæologist might be able by examining and photographing specimens of each style to determine their chronological succession and thus throw some light on the history of the city. The oldest type appeared to be that of the Inca Roca wall, very similar to that of the Sacsahuaman walls to be presently described.

form of art in pattern ornamentation and in figures of men and animals which we admire in the ruins of Copan (in Honduras) or Palenque (in Mexico) and other places in Central America. Perhaps the intractable nature of the volcanic and other hard igneous stone used by the Incas compared with the comparatively soft limestones of Palenque and Mitla discouraged attempts at elaborate mural decoration. Perhaps the artistic talent of the Peruvians did not go far. Their pottery, whether plain or made to represent the forms of living creatures, is generally rude, and the paintings on wooden vessels shew only mediocre power of drawing, though they do shew that fine sense of colour which is present in most of the art work of the aboriginal Americans.

Cuzco has no public museum, but there are two or three small private collections. In one of these the most interesting objects shewn us were the pictures on wood representing combats between Peruvian warriors and their enemies, the savage tribes of the eastern forests. The former fight with the spear and have the sling for their missile weapon, the latter use the bow, as do their descendants to this day. In this collection there were also bows taller than a man, with arrows of corresponding size, formidable weapons, which some of the natives of the forest, placing them flat on the ground, draw with their feet and with which they are said to kill fish in the rivers as well as land game. These, and the beautiful feather plumes, and the rude heads of pumas, wild cats, and birds of prey, had all a flavour of barbarism, and were

far inferior to the remains of Egyptian or Assyrian art.[22] The Peruvian mummies, specimens of which we also saw, are not laid out at full length, like those of Egypt, but have the knees pressed to the chin.

Grand as are the walls inside Cuzco, they seem insignificant when one examines the more stupendous ramparts of the prehistoric fortress on Sacsahuaman Hill, which rises immediately above the city to a height of about six hundred and fifty feet. I describe them the more fully because much study has been of late years bestowed upon the (so-called) Cyclopean and other ancient walls of Europe, such as those of Tarragona in Spain, of Greek cities, like Tiryns and Naxos (near Taormina), and of the Volscian and Latin cities round Rome, so that an account of the more imposing Peruvian structures may be of interest to some readers. The hill, nearly halfway up which, on a terrace, are the remains of its palace attributed to the Inca Manco Capac, is in its upper part extremely steep, in places even precipitous, and commands a wonderful view over the mass of red-roofed houses, the long, straight streets in some of which the dark lines of Inca wall can just be discerned, the three broad plazas with Indians and their llamas creeping about like ants, the sunny vale below, and the snow-clad summits of the Nevado (snow mountain) of Ausungate, piercing the sky in the far distance. Stone ramparts ran all round the upper part of the

---

[22] Good specimens of all these things may be seen in the American Museum of Natural History of New York.

hill, and parts of them still remain on this southern face. What with their height and solidity and with the natural strength of the ground, the fortress must have been on this side impregnable before the invention of gunpowder. But on the other, or northerly side, that turned away from Cuzco, the hill is not only less steep, but has also much less rise, for it is less than a hundred feet above the ground behind it. Here, therefore, since nature had done less, there was more for art to do; and here we find fortress walls on a scale of incomparable grandeur.

They are built in three parallel lines, one behind the other, and both their length, nearly one third of a mile, and the massiveness of their construction, and the enormous size of many of the individual stones make this fortress one of the most impressive monuments of prehistoric times that the world contains.[23] It shews that those who raised it had a boldness of conception and a persistent energy in carrying out that conception amazing in a primitive people, for the work seems to belong to a very early time, long anterior to those historic Incas whom the Spaniards overthrew.

Hardly less wonderful than the gigantic proportions of these fortifications is the military skill shewn in their construction. Their line is not straight, as in most of the walls of ancient Greek and Italian and early mediæval cities, but consists of a series of

[23] Some of the granite blocks in the fortress at Osaka in Japan are even larger, but these belong to the time of Hideoshi, early in the seventeenth century. There is some reason to think that the city or at least the neighbourhood of Cuzco may have been inhabited from very remote times.

salient and re-entering angles, so that from each salient angle and each inner angle the whole space outside and below the wall as far as the next projecting angle could be commanded by the garrison. This arrangement, which, while it increased the length of the work and required more labour to complete it, increased immensely its defensive efficiency, indicates a skill hardly to be expected in a race comparatively pacific, and more eminent in the arts of government than in those of war. Yet perhaps it was just because they were not first-class fighting men like the Aztecs or the Iroquois that the Quichuas were successful in devising expedients for defence. Sparta was the only considerable Greek city that did not surround herself with walls, because the valour of her people was deemed sufficient protection.

On the top of the hill behind these lines of ramparts there are remains of ancient buildings, though none with such enormous stones. It is hard to make out what these edifices were, for every bit of ground built upon has been ransacked over and over again for hidden treasure. Peru is full of stories about fabulous quantities of Inca gold hidden away to save it from the rapacity of the conquerors, and some of the tales may be true, though hardly any such treasures have been found for more than a century past. But the story that there is a secret passage cut in the rock from the Inca castle at the top of the hill down through it and into Cuzco where it opens to the Temple of the Sun is too much for any but native credulity. These beliefs in long subterranean passages recur everywhere in the world. It was – perhaps still is

– believed in Oxford that there is such an one from the church of St. Peter in the city to the ruined nunnery on the river at Godstow (Fair Rosamond's place of confinement) two miles distant. It is believed in Kerwan (in Tunisia) that the most sacred of the wells in that most sacred of all African cities communicates underground with the well Zem Zem in Mecca two thousand miles away and on the other side of the Red Sea. The most persistent treasure hunt carried on by the Peruvians has been that for the golden chain made by the Inca Huayna Capac, which was long enough to be stretched all round the great square of Cuzco, and was thrown into the lake of Urcos lest it should fall into the hands of the Spaniards. Everybody believes it to be still at the bottom of the lake, which is very deep.

Opposite the great walls and about a third of a mile away is a rocky eminence called, from a curious convex mass of extremely hard igneous rock upon it, the Rodadero. The rock is polished smooth and has two projecting ridges on its surface. How much of this peculiar slope down which many generations of Peruvian boys have rejoiced to slide – they were doing so in the days of Garcilaso, soon after the Conquest – is due to nature, how much to art improving nature, has been matter for controversy. But far more curious are the seats carved in the hard rock all over the top and slopes of the hill, the cutting done with exquisite care and finish, the angles perfectly sharp, the flat parts perfectly smooth. The most remarkable is a set of thirteen seats, one in the centre and highest, nine others declining from it on the left and three

on the right. This is called the Seat of the Inca, but there is no record, nor any authentic tradition, of the purpose for which, or the persons by whom, it was constructed, nor of the purpose of the many other seats, and small staircases, and niches, and basins similarly chiselled out of the rock which are scattered here and there all round. In one place two great and finely cut blocks look like fragments of a doorway shattered by an earthquake, and not far off there are singular passages hewn through the rock, and now in parts closed, which have the appearance of a sort of labyrinth. Looking at the Inca's Seat, one's first conjecture would be that it was a bench for judges to sit upon. Other seats look more like shrines meant for images; but no fragments of images are found. All these strange cuttings and polishings seem so inexplicable that one would conjecture the mere caprice of a whimsical ruler, but for the immense pains that must have been taken in doing such perfect work in such hard material. No Spanish writer of Conquest days gives us any light. It is a riddle, the key to which is lost, and lost irrecoverably, because there are no inscriptions and no traditions.

Reverting to the fortress of Sacsahuaman, there is a current view that it was erected as an outwork to defend Cuzco from the attacks of the fierce tribes of the eastern and northern valleys whose raids the Incas frequently had to repel. It seems, however, superfluously huge as a defence against such enemies, not to add that they could easily have descended upon Cuzco from the other sides of the two ravines between which the fortress stands. More

probably, therefore Sacsahuaman is a very ancient stronghold, probably much older than Cuzco, or at any rate than Cuzco's greatness. It may have been the earliest seat of some very early king or dynasty, and have been, in the flourishing days of the Inca monarchy, a citadel where the reigning sovereign kept his treasures and to which he could retire for safety in case of need.

I am not attempting to describe all the relics of antiquity that are to be seen in or near Cuzco. There are striking ruins not far off, such as those at Ollantaytambo and Pisac, and lower down the Vilcamayu Valley at Machu Picchu and Rosas Pata, as well as others still more distant in the high country between here and Lima.[24] But what is true at Cuzco is true everywhere. The only ruins are of walls and gates of fortresses and palaces; in a few spots of temples, also. In these there are evidences of enormous labour and considerable mechanical skill, but only slight evidences of artistic talent. The walls, perfectly cut and polished, have seldom the smallest ornament, except niches. There are no domes, for the art of vaulting was unknown, and hardly ever columns. So far as we can tell, the great Sun Temple at Cuzco consisted only of lofty walls enclosing courts, with no decoration but plates of gold attached to the walls. True it is that the Spaniards destroyed all the religious and many of the secular

---

[24] Such as that at Choqquequirau described by my friend Professor Bingham in his book entitled *Across South America*. He discovered, in 1911, an Inca building at a place on the river Pampaconas fifteen days' journey north of Cuzco and only two thousand feet above sea-level. It was not previously known that their power had extended so far in that direction.

edifices, yet if there had been temples covered with ornaments like those found in Southern Mexico and Central America, some traces must surely have remained.

Notwithstanding this want of decorative art, the Cuzco ruins leave upon the beholder a strong impression, the impression of immense energy and will in those who planned these works, of patient and highly trained labour in those who executed them. Only despotic rulers commanding like the Egyptian kings a host of obedient subjects, could have reared such a structure as the fortress of Sacsahuaman. The race that could erect such buildings and gather such treasures as the Temple of the Sun possessed, and could conquer and rule a dominion of fifty days' journey from north to south, must have been a strong and in its way a gifted race. It is hard to believe that it was the ancestor of those stolid and downtrodden Indians whom one sees to-day, peddling their rude wares in the market place of Cuzco. It is their old imperial town, but there is scarcely one among them above the rank of a labourer; and during the last three centuries few indeed have emerged from the abject condition to which the Conquest reduced them.

The sudden fall of a whole race is an event so rare in history that one seeks for explanations. It may be that not only the royal Inca family, but nearly the whole ruling class was destroyed in war, leaving only the peasants who had already been serfs under their native sovereigns. But one is disposed to believe that the tremendous catastrophe which befell them in the destruction at

once of their dynasty, their empire, and their religion by fierce conquerors, incomparably superior in energy and knowledge, completely broke not only the spirit of the nation, but the self-respect of the individuals who composed it. They were already a docile and submissive people, and now under a new tyranny, far harsher than that of rulers of their own blood, they sank into hopeless apathy, and ceased even to remember what their forefathers had been. The intensity of their devotion to their sovereign and their deity made them helpless when both were overthrown, leaving them nothing to turn to, nothing to strive for. The Conquistadores were wise in their hateful way, when they put forth the resources of cruelty to outrage the feelings of the people and stamp terror in their hearts. One cannot stand in the great Plaza of Cuzco without recalling the scene of A.D. 1571, when one of the last of the Inca line, an innocent youth, seized and accused of rebellion by the Spanish viceroy Francisco de Toledo, was executed in the presence of a vast Indian crowd that filled it. When the executioner raised the sword of death, there rose such a wail of horror that he paused, and the leading Spanish churchmen hastened to the viceroy and begged him for mercy. Determined to make an example, Toledo was inexorable. The young Inca, Tupac Amaru, was beheaded and his head stuck on a pike, and placed beside the scaffold. At midnight a Spaniard, looking out of a window that commanded the Plaza was amazed to see it again filled with Indians, all silent and motionless, kneeling in veneration before the head of the last representative of the sacred

line.

More than two hundred years later another more remote scion of the Incas, José Gabriel Condorcanqui, who had taken the same name of Tupac Amaru, – I have already referred to him on p. 92, – had been stirred to indignation by what he saw of the Indian population suffering from the exactions as well of the Spanish landowners who held them in serfdom as of the rapacious Spanish officials. After many vain complaints, he headed a movement to obtain redress by force, not rejecting the authority of the Spanish Crown, but trying to rouse the Indians by appeals to the faint memories of Inca greatness. The hope of relief from their miseries drew thousands of the aborigines to his standard. But they were ill armed and worse organized; the race had no longer any strength in it for a fight, and in some months the rising was quelled, after frightful slaughter, its leader betrayed to the Spaniards, his family seized, and all brought prisoners to Cuzco. There, by the sentence of the Spanish judge, a monster named Areche, the uncle and son-in-law and wife of Tupac Amaru, had their tongues cut out and were executed before his eyes, that death might be made more horrible to him by the sight of their agonies. He was then, after his own tongue had been cut out, torn in pieces by four horses attached to his four limbs. All this happened in 1781, within the memory of the grandfathers of men now living. Such atrocities were at once the evidence of what Spanish rule in Peru had been and a presage of its fall. Within twenty years thereafter began those first conspiracies against the

authority of Spain which ushered in the War of Independence.

Many another scene of horror and strife has Cuzco seen. Wandering through its streets, one is possessed every moment by the sense of how much has happened in a place where nowadays nothing seems to happen. Perhaps it is because its annals are so tragic that this sense is so strong; but there are certainly few places where the very stones seem more saturated with history. More than three centuries ago the historian Garcilaso de la Vega compared Cuzco to ancient Rome. The two cities have little more in common than the fact that both were capitals of dominions long since departed, and the seats of faiths long since extinct. But in both this feeling of a vista stretching far back and filled with many spectres of the past is overpowering. The long, grey, mouldering streets and houses of Spanish Cuzco, the ancient walls of primitive Peruvian Cuzco, defying time better than the convents and the churches, each calling up contrasted races and civilizations, the plazas too vast for the shrunken population, the curious sense of two peoples living side by side in a place from which the old life has vanished and into which no new life has come, the sense of utter remoteness from the modern world, all these things give to Cuzco a strange and dreamy melancholy, a melancholy all the deeper because there was little in its past that one could wish restored. There were dark sides to the ancient civilization. But was it worth destroying in order to erect on its ruins what the Conquerors brought to Peru?

NOTE ON THE FORTRESS OF SACSAHUAMAN

The walls of Sacsahuaman are built in three parallel lines, the lowest of which stands on level ground, at the very base of the hill; the second about six yards behind the first, and therefore on the slope; the third still higher on the slope, three yards behind the second. The space behind each wall has been filled in and levelled, so as to be a nearly flat terrace, supported by the wall in front of it. These three lines of wall extend along and protect the whole northern face of the hill, nearly six hundred yards long, between the points where it falls abruptly into deep ravines to the east and the west, which give a natural defence. The outermost wall at the base of the hill is the highest, about twenty-six feet; the second is from eighteen to twenty feet; the third, the least perfectly preserved, is a little less high, perhaps fifteen feet. The stones in the outermost row are the largest. One is over twenty-five feet high, fourteen wide, and twelve thick. Not a few exceed fifteen feet in height and twelve in width. There were three openings or gateways in each wall, the largest of which is twelve feet high, and over each of these was laid a long flat slab. The blocks, which are of a hard, greyish limestone, are all or nearly all rudely square or oblong, though sometimes where the shape of one is irregular, the irregularity is cut into an entering angle and the next stone is made to fit into this with its projecting angle, thus knitting the structure together. The surface of each is slightly

convex and bevelled down towards the outer lines, where it meets the blocks laid next. All are so carefully adjusted that even now there are virtually no interstices, though the fitting together may probably have been even more exact before earthquakes and time had begun to tell upon the fabric. Its strength, as there is no mortar, depends upon the massiveness of the stones and their cohesion. Each wall rises a little, perhaps a foot and a half, above the terrace immediately behind it, but the level of the terrace may probably have been originally somewhat lower, so that the bodies of those defending the fortress would be better covered by the wall in front of them against missiles from the enemy.

The stones of Sacsahuaman have been brought from a hill about three-quarters of a mile distant, where a huge mound of chips cut from them has been discovered by Mr. Bingham since the date of my visit. (Edition of 1913.)

CHAPTER IV
LAKE TITICACA AND THE CENTRAL ANDES

From Cuzco, the oldest of South American cities, with its mingled memories of an Indian and a Spanish past, I will ask the reader to follow me to a land of ancient silence where an aboriginal people, under the pressure of a stern nature, and almost untouched by all that modern civilization has brought, still lead the lives and cling to the beliefs that their ancestors led and held many centuries ago. This is the heart of the Andean plateau, where, in a country almost as purely Indian as it was when it submitted to Pizarro, lies Lake Titicaca.

Ever since as a boy I had read of a great inland sea lying between the two ranges of the Cordillera almost as high above the ocean as is the top of the Jungfrau, I had wondered what the scenery of such mountains and such a sea might be like, and had searched books and questioned travellers without getting from them what I sought. There are no other bodies of fresh water on the earth's surface nearly so lofty, except on the plateaux of Central Asia, and none of these, such as the Manasarowar lakes in Tibet[25] and Lake Sir-i-kul in the Pamirs is nearly so extensive

[25] Dr. Sven Hedin gives the height of Tso Mavang as 15,098 feet above sea level.

as this lake in Peru. It fills the lower part of an immense shallow depression between the eastern and western Cordilleras; and the land both to the north and to the south of it is for a great distance so level that we may believe the area covered by its waters to have been at one time far greater. Its present length is about one hundred and twenty miles, its greatest width forty-one miles, and its area nearly equal to that of Lake Erie. The shape is extremely irregular, for there are many deep bays, and many far projecting promontories. There are also many islands, two of which, famous in Peruvian mythology, I shall presently describe.

This central plateau of Peru is a singular region. As its height is from twelve thousand to thirteen thousand feet above sea level, the climate is always cold, except when one is actually exposed to the direct rays of the sun, but it varies comparatively little from the summer to the winter months; and though snow often falls, it soon disappears. In so inclement an air, and with a rather scanty rainfall, only a few hardy crops can ripen, such as potatoes (the plant is a native of South America, and there are many other species of *Solanum*), barley, the Oca (*Oxalis tuberosa*, a sort of wood sorrel), and the Quinoa (a kind of edible *Chenopodium*)[26] as well as maize, but this last only in the warmer and more sheltered places. There are few trees, and these stunted; nowhere a wood. Even the shrubs are mere scrub, so fuel is scarce and

[26] In some parts of Mexico the Indians use the seeds of a species of *Chenopodium* for food. Civilized man has not yet troubled himself to enquire what possibilities of development there may be in some of the plants which primitive or barbarous man turned to account.

the people use for cooking purposes in the mountains the tufts of a large woody-rooted plant called *Yareta*, growing in the high mountains which, like the peat of Ireland, burns fiercely, but is soon burnt out, and, on the lower grounds, *taquia* (the droppings of the llama), as the droppings of the yak are similarly used in Tibet. Nobody thinks of lighting a fire for warmth: for while the natives seem not to feel the cold, white people shiver and put on more clothes. One is surprised that man should have continued to dwell in a land so ungenial when not far off to the east, on the other side of the eastern Cordillera, hot valleys and an abundant rainfall promise easier conditions of life.

This lofty tract, stretching from the snowy peaks of the Vilcanota as far as La Paz in Bolivia, a distance of more than two hundred miles, the northern and western parts of it in Peru, the eastern and southern in Bolivia, is really a pure Indian country, and is named the Collao. In ancient days it was one of the four divisions of the Inca Empire. The inhabitants speak a language called Aymará, allied to the Quichua spoken farther north. In Inca days there were apparently many small tribes, each with its own tongue, but their names and memories have perished with their languages, and with the trifling exception of a small and very primitive race called the Urus (to be mentioned later) all the aborigines of the High Andes are now classified as Quichuas and Aymarás. The modern distinction between Peru and Bolivia is purely arbitrary and political. Aymarás dwelling west of the lake in Peru are the same people as Aymarás dwelling east of it

in Bolivia.

Like Tibet, which it most resembles in height and cold and dryness, this strange country produces no more than what its inhabitants consume and has nothing to export except alpaca wool and minerals, nor, at present, very much of these latter, for only few mines are now being worked. The population does not increase, but it holds its ground, and wherever the soil is fit for cultivation, that is to say, wherever it is not too stony or too swampy, it is cultivated by the Indians, who live here in the same rude fashion as their forefathers before the Conquest. Nor is it only on the flat bottoms of the valleys that one sees their little patches of potatoes and barley. The steep slopes of the hills that rise from the lake have also been terraced to make ground level for cultivation, and each strip of soil is supported by a wall of loose stones well fitted together. These *andenes*, as they are called, which are common all over the hilly grounds of Peru, remind one of the vine-bearing terraces of the Rhineland, and like them witness to centuries of patient toil. As there is no manure nor other fertilizer, the soil is allowed to rest by lying fallow from time to time, so the area under cultivation in any one year is less than the number of the terraces might suggest. Though all the tillers are Indians, most of the land belongs to large proprietors who seldom come to it for more than a couple of months in the year, the peasants paying them either in a share of the crops, or a certain number of days' labour on the proprietor's own special *hacienda* or *finca* (farm) which his steward manages,

or perhaps in personal service for some weeks rendered to him in the town he inhabits. Rude and harsh is the life of these peasants, though well above the fear of starvation and no more squalid than that of the agricultural peasantry in some parts of Europe. Their houses are of mud baked hard in the sun – the usual *adobe* of Spanish America – or perhaps of large stones roughly set in the mud as a cement; animals often share the family bedroom, and the sleeping places are a sort of platform or divan of earth raised a little from the floor along the walls of the hut. Furniture there is virtually none, for wood is scarce and costly so far from the coast on one side and the forests on the other, but some of them have scraped together a good deal of property, including rich dresses and ornaments fit to be displayed at festivals. For clothing they have a shirt and drawers of coarse cotton, with a poncho of heavy woollen cloth; for food, potatoes frozen and squeezed dry, to enable them to be stored, and barley; their only luxury is *chicha* beer, or alcohol when they can get it; their diversions, church festivals with processions in the morning and orgiastic dances afterwards; or a fight with the inhabitants of the neighbouring village. Yet with all this apparent poverty and squalor, they are in this region, and have been for many ages, more advanced in the arts of life than their neighbours, those half nomad tribes of the trans-Andean forests, who subsist on what their arrows or blow-pipes can kill, and live in terror of the jaguar and the anaconda and the still more dangerous packs of wild dogs and peccaries. Agriculture and settled life are always factors of

material progress, and the Aymarás would probably have risen out of the sort of practical serfdom in which they lie and from which scarcely any of them emerge, if they had not fallen under the dominion of an alien and stronger race who had no sympathy with them and did nothing to help them upwards.

I return to the lake itself which fills the centre of this singular plateau. Its northern and northwestern coasts, lying in Peruvian territory, are low and the water shallow, while the eastern and southern, in Bolivia, are generally high and bold with many rocky promontories and isles lying off them. The greatest depth is about six hundred feet. Storms are frequent, and the short, heavy waves make navigation dangerous, all the more so because the water is so cold that, as is the case in Lake Superior also, a swimmer is so soon benumbed that his chance of reaching land is slight. Ice sometimes forms in the shallower bays, but seldom lasts. Many are the water birds, gulls and divers, and flamingoes, and a kind of heron, besides eagles and hawks, though the big so-called turkey buzzard of the lower country does not seem to come so high, and the huge condor is no longer frequent. There are plenty of fish, but apparently of two genera only, the species (eight are enumerated) being most of them known only in this lake and in Lake Poopo, into which it discharges. The scantiness both of fauna and flora is natural when the unfavourable climatic conditions are considered. Among the water plants the commonest is a sort of rush, apparently a species of, or allied to, the British and North American genus *Scirpus*,

and called *Totora*. It grows in water two to six feet deep, rising several feet above the surface, and is the material out of which the Indians, having no wood, construct their vessels, plaiting it and tying bunches of it together, for it is tough as well as buoyant. In these apparently frail craft, propelled by sails of the same material, they traverse the lake, carrying in each two or three men and sometimes a pretty heavy load. These vessels which, having neither prow nor stern, though the ends are raised, resemble rafts rather than boats, are steered and, when wind fails, are moved forward by paddles. Their merit is that of being unsinkable, so that when a storm knocks them to pieces the mariner may support himself on any one of the rush bundles and drift to shore if he does not succumb to the cold. They soon become waterlogged and useless, but this does not matter, for the *totora* can be had for the gathering, and the supply exceeds the demand. This primitive kind of craft was known on the coast of Peru also: the first Spanish explorers met rafts of wood there carrying merchandise.

Nowadays four small steamers ply on the lake, one of them making a regular tri-weekly service from Puno, in Peru, the terminus of the Peruvian Southern railway, to Guaqui in Bolivia, whence a railway runs to La Paz. This is at present the quickest way from Panama and the coast of Peru to Central Bolivia.

The water of Titicaca is pure and exquisitely clear. Some have described it as brackish, but I could discover no saline taste whatever. Many streams enter it from the surrounding snow-clad mountains; and it discharges southward by a river called

the Desaguadero, which flows with a gentle current across the Bolivian plateau for one hundred and twenty miles into the large, shallow lagoon of Poopo or Aullagas, itself once part of that great inland sea of which Titicaca is now the largest remnant. This lake of Poopo has no outlet to the sea. Part of its water is licked up by the fiery sun of the desert: the rest sinks into the sands and is lost.

We spent two days sailing on the lake, visiting the famous modern shrine of the Virgin of the Light at Copacavana on the mainland and the famous ancient shrine of the Rock of the Sun and the Wild Cat on the island of Titicaca which has given its name to the lake. When the grey clouds brood low upon the hills, stern and gloomy indeed must be the landscape in this bleak land. But our visit fell in the end of September, the spring of Peru, when such rains as there are had begun to refresh the land after the arid winter. The sun was bright. Only a few white clouds were hanging high in air or clinging to the slopes of the distant mountains; and the watery plain over which we moved was a sheet of dazzling blue. The blue of Titicaca is peculiar, not deep and dark, as that of the tropical ocean, nor opaque, like the blue-green of Lake Leman nor like that warm purple of the Ægean which Homer compares to dark red wine, but a clear, cold, crystalline blue, even as is that of the cold sky vaulted over it. Even in this blazing sunlight it had that sort of chilly glitter one sees in the crevasses of a glacier; and the wavelets sparkled like diamonds.

The Peruvian shore along which we were sailing was steep

and bold, with promontories jutting out and rocky islets fringing them. Far away to the east across the shining waters the Bolivian coast rose in successive brown terraces, flat-topped hills where the land was tilled, and higher up bluish grey ridges passing into a soft lilac as they receded, and farther still, faint yet clear in the northeast, the serrated lines of the snowy Cordillera which divides the lake basin from the valleys that run down to the east and the Amazonian forests. There was something of mystery and romance in these far distant peaks, which few Europeans have ever approached, for they lie in a dry region almost uninhabited because hardly worth inhabiting, —

> "a waste land where no man goes
> Or hath gone, since the making of this world."

The nearer and higher range to the southeast of the lake, which the natives call the Cordillera Real, and geographers the range of Sorata, was almost hidden by the thick clouds which were by this time – for it was now ten o'clock, and the sun was raising vapours from the valleys – gathering on its snows, and not till the evening did its grand proportions stand disclosed. There were all sorts of colours in the landscape, bright green rushes filling the shallow bays, deep black lava flows from a volcanic peak on the west, and a wonderful variety of yellows, pinks, and violets melting into each other on the distant hills. But the predominant tone, which seems to embrace all the rest was a grey-blue of that peculiar pearly quality which the presence of a large body of smooth water gives. Views on a great lake can be more impressive than almost

any ocean views, because on the ocean one sees only a little way around, whereas, where distant heights are visible beyond the expanse of a lake, the vastness of the landscape in all its parts is realized. Here we could see in two different directions mountain ranges a hundred miles away: and the immensity was solemn.

The village of Copacavana, to which we first turned our course, stands a little above the lake at the foot of rocky heights, beyond which rises a lofty volcano, said to have been active only a century ago. Traces of antiquity are found in the polished stone seats, two on each side of a higher one, called the Judgment Seat of the Inca, and in steps cut here and there, all in the hard rock, their form resembling that of those near Cuzco, described in the last chapter, and their purpose no less obscure.[27] Other ruins and abundant traditions prove that the place was a noted seat of worship in Inca days. There stood on it, say the early Spanish chroniclers, not only gilded and silvered figures of the Sun and Moon, but also older idols, belonging to some older local religion, one in particular which is described as having a head like an egg with a limbless body, wreathed with snakes. When these figures and their shrines were demolished, a church was erected on the same spot, which presently became famous by the setting up in it of a sacred image of Our Lady. It is the Santissima Virgen de la Candelaria, carved by a scion of the

---

[27] Dr. Uhle has suggested that the so-called seats may have been places on which to set images. Mr. Bingham thinks they were more probably spots on which priests stood to salute the rising sun by wafting kisses with their hands, a Peruvian practice described by Calancha, who compares the book of Job, chap. xxxi, v. 27.

Incas, Francisco Tito Yupanqui, in A.D. 1583. This image had been seen by a pious friar to send out rays of light around it: miracles followed, and an Augustinian monastery was founded and placed in charge of the sanctuary, which soon became the most frequented place of pilgrimage through all South America. Even from Mexico and from Europe pilgrims come hoping for the cure of their diseases. The figure is about a yard high, and represents a face of the Indian type in features and colour, though less dark than the equally sacred figure of the Virgin of the Pillar at Saragosa in Spain. It wears a crown of gold, with a gold halo outside the crown, has a half moon under its feet, and is adorned with many superb gems. The church is spacious and stately. The Camarin or sacred chamber in which the image stands is behind the great altar and approached by two staircases, the stone steps much worn by the knees of the ascending worshippers. The Augustinian monks were turned out in 1826, after the revolutionary war, but recently a few Franciscans have been settled in a home too large for them, so the wide cloisters are melancholy, and echo to few footfalls. Nevertheless great crowds of Indians still resort hither twice a year, on February 2, the feast of the Candelaria (Candlemas), and on August 5 and 6. Within the sacred enclosure which surrounds the church is a lofty cupola supported by columns, open at its sides so that the three tall crosses within it are visible, and roofed in a sort of Moorish style with bright green and yellow tiles, of the kind which North Africa has borrowed from the East. Round it are

the accustomed pilgrimage "stations," and at the corners of the court, which is entered by a lofty gateway and planted with trees, are square brick buildings, wherein lie the bones of pilgrims. The shining tiles of this cupola, with the similarly decorated dome and tower of the church behind, make a striking group, whose half Moorish character looks strange in this far western land. The scene at the great festivals when the excited Indian crowd makes church and court resound with hymns in Aymará and when, after the Christian services of the day, the dances of primitive heathendom are kept up all through the darkness with wild shoutings and jumpings, till they end in a sort of jig, is described as strange and revolting. These dances come down from a time when this was a seat of Indian nature worship, and when images of the Sun and Moon were taken in pomp from the shrine here to the shrines upon the Sacred Isles.

To those isles we now bent our course. Delightful was the voyage along the southern shore of the lake, past shallow bays where the green water lapped softly in the rushes, across the openings of inlets that ran far in between walls of rock, with new islands coming into view and glimpses of new snowpeaks in the distance rising behind the nearer ranges, all flooded by a sunlight that had the brilliance without the sultry power of the tropics.

Koati or Koyata, the Island of the Moon, is said to take its name from Koya, the Quichua word for queen, the Moon being the wife of the Sun, whose worship the Incas established wherever their power extended. The isle is about two miles long,

a steep ridge, covered in parts with low shrubs and grass; the rest cultivated, the slopes being carefully terraced to the top. The most interesting group of ruins stands in a beautiful situation some sixty feet above the shore, on the uppermost of four broad terraces, supported by walls. One of these walls is of the finished Cuzco style of stonework, the rectangular blocks well cut and neatly fitted to one another. It is probably of Inca date. That the large ruined edifice above has the same origin may be concluded from the niches which occur in the walls of its chambers. The purpose of such niches, frequent in the Cuzco walls, and indeed all over Peru, has never been explained. They are often too shallow for cupboards or wardrobes, and too high for images, yet it is hard to suppose them meant merely for ornament. This edifice, originally in two stories, is a mass of chambers, mostly small, which are connected by narrow passages. The large walled court which adjoins it is adorned by stuccoed niches. The walls are well preserved, but all the ceilings and roofs have gone. There are so few apertures for light that it is hard, as in most of the ancient Peruvian houses to understand how light was admitted. Probably light was sacrificed for the sake of warmth, for the nights are extremely cold, even in summer. Doorways are covered sometimes by a single slab, sometimes by flat stones projecting each beyond the other, so as to have the effect of an arch, but no true arch ever seems to have been found in Peru or anywhere else in the Western Hemisphere. Sacrificial objects, dug up in front of the building, confirm the legend that the place

was a shrine of the Moon Mother, but the name by which it has been known is the Palace of the Virgins of the Sun. There may, therefore, have been in conjunction with the shrine one of the numerous establishments in which the Incas kept the women who were sent up to them as a tribute from the provinces, and who, among other things, wove fine fabrics and made various articles needed for worship. The early Spanish writers, with their heads full of Christian nuns and Roman Vestals, called them Virgins of the Sun, but the name was altogether inappropriate, for many of them were kept as concubines for the reigning Inca.

Four miles from Koati and two from the mainland, lies the larger and more sacred Island of the Sun. It is ten miles long, nowhere more than a mile wide, and very irregular in shape, being deeply indented by bays. A ridge of hills, rising in places to one thousand feet or more, traverses it from end to end, and much of the surface is too steep and rocky for tillage. There are many groups of ruins on it, the origin and character of some among which have given rise to controversies into which I need not enter, proposing to describe two only. One of these is the so-called Fountain, or Bath and Garden of the Inca. Two buildings stand on the shore, evidently of a date anterior to the Conquest, and one was probably a royal residence. The most recent and most competent investigators divide them into two classes: those which the Indians call Chulpas, and are the work of an earlier race or races, and those which they ascribe to the Incas, the latter being larger and better built, and accompanied by pottery,

weapons, and other relics, indicating a more advanced culture. Hard by a flight of low steps, rising from the water through a grove of trees, leads up to a spot where a rivulet, led in a channel from the hill above, pours itself into a receptacle hewed out of one piece of stone, whence it pursues its course in a murmuring rill to the lake below. The terraced garden on each side is planted with flowers, most of which are the same as those in European or North American gardens; but the brilliant red blossoms of the shrub called the *Flor del Inca* give a true local colour, and the view over the lake to the distant snows is unlike anything else in the world. How much of the beauty we now see was planned by the unknown monarch, who first made these terraces, and did the spot commend itself to him by the wonderful prospect it commands? Most of the so-called palaces of these isles occupy sites that look across the lake to the great snowy range, but a learned archæologist suggests that this was due not to admiration of their grandeur, but to veneration for them as potent deities so that they might be more readily and frequently adored.

On this majestic range our eyes had been fixed all day long. Its northernmost summit, Illampu, stands more than twenty miles back from the eastern shore of the lake, and more than thirty miles from the Island of the Sun. Thence the chain trends southward, ending one hundred miles away in the gigantic Illimani, which looks down upon La Paz. All day long we had watched the white clouds rise and gather, and swathe the great peaks and rest in the glacier hollows between them, and seem

to dissolve or move away, leaving some top clear for a moment, and then settle down again, just as one sees the vapours that rise from the Lombard plain form into clouds that float round and enwrap Monte Rosa during the heats of a summer day. Evening was beginning to fall when our vessel, after coasting along the island, anchored in the secluded bay of Challa, where, behind a rocky cape, there is an Indian hamlet and a garden and stone tank like that at the Bath of the Inca. We landed and rambled through it, finding its thick trees and rustling shade specially charming in this bare land. Just as we emerged from them and regained the lake shore, the sun was setting, and as the air cooled, the clouds that draped the mountains thinned and scattered and suddenly vanished, and the majestic line of pinnacles stood out, glowing rosy red in the level sunlight, and then turned in a few moments to a ghostly white, doubly ghostly against a deep blue-grey sky, as swift black night began to descend.

Early next morning we set off on foot along the track, well beaten by the feet of many generations of worshippers, which leads along the rocky slopes from Challa to the Sanctuary of the Rock. Here are no houses, for this end of the isle is rough and bare, giving only scanty pasture and a few aromatic flowers, but the little bays where the green water ripples on the sands, and the picturesque cliffs, and the vast stretch of lake beyond, made every step delightful. To our surprise we passed a spot where some enterprising stranger had bored for coal and found a bed, but not worth working. One could hardly be sorry, for though

fuel is badly needed here, a colliery and its chimney would fit neither the landscape nor the associations. Less than three miles' walking brought us to a place where the remains of a wall cross the island, here scarcely a mile wide, and seem to mark off the sacred part which in Inca days was entered only for the purposes of worship. A little farther, two marks in the rock, resembling giant footprints, are, according to Indian tradition, the footprints of the Sun God and the Moon Goddess, when they appeared here. The marks are obviously natural and due to the form in which a softer bit of the sandstone rock has scaled off and left a whitish surface, while the harder part, probably containing a little more iron, as it is browner in hue, has been less affected by the elements. Then, after ascending a few low steps which seem to be ancient, we came out on a level space of grass in front of a ridge of rock about twenty-five feet high. This is Titi Kala, the Sacred Rock, the centre of the most ancient mythology of South America. Its face, which looks southwest over this space of grass, apparently artificially levelled, is on that side precipitous, presenting a not quite smooth face in which veins of slightly different colours of brown and yellowish grey are seen. At one point these veins so run as to present something like the head of a wild cat or puma; and as Titi means a wild cat in Aymará, and Kala, or Kaka a rock, this is supposed to be the origin of the name Titi Kala, which has been extended from the rock to the island and from the island to the lake.[28]

---

[28] Lake Titicaca was originally, it would seem, called the lake of Chucuito, from an

The rock is composed of a light yellowish brown rather hard sandstone of carboniferous age, with a slaty cleavage. The back of the ridge is convex, and is easily climbed. From it the ground falls rapidly to the lake, about three hundred feet below. Except for what may possibly be an artificial incision at the top, the rock appears to be entirely in its natural state, the cave-like hollow at its base shewing no sign of man's handiwork. Neither does any existing building touch it. There are, however, traces of walls enclosing the space in front of it, especially on the north side, where there seems to have been a walled-in enclosure; and there are other ancient remains hard by. The only one of these sufficiently preserved to enable us to conjecture its purpose is a somewhat perplexing two-storied edifice, resembling, though less large and handsome, that which I have described as existing on the island of Koati. It is called the Chingana, or Labyrinth, and doubtless dates from Inca times, as it contains niches and other features characteristic of the architecture of that period. The numerous rooms are small, scantily lighted, and connected by narrow passages. A few flowers had rooted on the top of the walls, and I found tufts of maidenhair fern nestling in the moist, dark corners within. All the roofs have perished. There is nothing to suggest a place of worship, so probably the building contained the quarters provided for the various attendants on the religious rites performed here, and perhaps also for the women who were kept near many sanctuaries and palaces for the service of the Sun

---

ancient town on its western shore.

and the Incas. None of the other ruins is identifiable as a temple, so we are left in doubt whether any temple that may have existed was destroyed by the zeal of the Spanish Conquerors, or whether the worship of the Sun and the local spirits was conducted in the open air in front of the Rock, whose surface was, according to some rather doubtful authorities, covered with plates of gold and silver. In front of the Rock there lies a flat stone which it has been conjectured may have been used for sacrifices. All our authorities agree that the place was most sacred. Some say no one was allowed to touch it; and at it oracles were delivered, which the Spaniards accepted as real, while attributing them to devils who dwelt inside the rock. Of the many legends relating to the place only two need be mentioned. One is that here the Sun, pitying the barbarous and wretched condition of men, took his two children, Manco Capac and Mama (mother) Occlo, and giving them a short staff or wand of gold, directed them to go forward, till they should find a place where the staff on being struck against the ground entered and stuck fast. They travelled to the north for many days, and the wand finally entered the earth at Cuzco, where they accordingly built a city and founded their dominion, Manco being the first of the Inca dynasty. The other tale is that for a long, long time there was darkness over the earth and great sorrow among men till at last the Sun suddenly rose out of the Rock on Titicaca, which was thenceforward sacred and a place of sacrifice and oracles. Other traditions, more or less differing from these in details, agree in making Titicaca the

original home of the Incas, and one of them curiously recalls a Mexican story by placing on it a great foreign Teacher whom the Spaniards identified with St. Thomas the Apostle.[29] In these stories, some written down by Spanish explorers or treasure seekers at the time of the Conquest or collected subsequently by learned ecclesiastics, some still surviving, with grotesque variations, in the minds of the peasantry, we may distinguish three salient points, – first, the veneration for the Rock as an object; secondly, its close relation to Sun worship; and thirdly, its connection with the Inca rulers of Cuzco. It is a plausible view that from ancient pre-Inca times the Rock was a *Huaca* or sacred object (in fact a fetish, *i. e.* an object inhabited by a spirit) to the primitive tribes of the island and lake coasts, as the cleft rock of Delphi was to the Greeks, even as the Black Stone which they called the Mother of the gods was to the Phrygian worshippers of Cybele, as perhaps the Stone of Tara – perhaps even the Lia Fail or Coronation Stone of Scone and now of Westminster Abbey – was to our Celtic ancestors. When the Incas established their dominion over the region round the lake they made this spot a sanctuary of the sun, following their settled

[29] St. Thomas, according to an early legend, preached the Gospel on the coast of Malabar, so the Spanish ecclesiastics when they came to Mexico and Peru and heard tales of a wise deity or semi-divine teacher who had long ago appeared among the natives, concluded this must have been the Apostle, the idea of the connection of Eastern Asia with these new Western lands being still in their minds.In the ancient city of Tlascala in Mexico I have seen a picture representing St. Thomas preaching to the natives in the guise of the Mexican deity Quetzalcoatl, the Feathered Snake. St. Thomas is depicted as half serpent, half bird, but with a human head.

policy of superadding the imperial religion of Sun worship – the Sun being their celestial progenitor – to the primitive veneration and propitiation of local spirits which their subjects practised. It was thus that the Roman Emperors added the worship of the goddess of Rome to that of the local deities of Western Asia and Africa and set up to her great temples, like that at Pergamos, among and above the older shrines. If there be truth in the legend that the Incas were themselves originally a tribe of the Collas of the plateau who quitted their former seats to go northward to the conquest of Cuzco, it would be all the more natural for them to honour this sanctuary as an ancient home of their race.

Конец ознакомительного фрагмента.

Текст предоставлен ООО «ЛитРес».

Прочитайте эту книгу целиком, купив полную легальную версию на ЛитРес.

Безопасно оплатить книгу можно банковской картой Visa, MasterCard, Maestro, со счета мобильного телефона, с платежного терминала, в салоне МТС или Связной, через PayPal, WebMoney, Яндекс.Деньги, QIWI Кошелек, бонусными картами или другим удобным Вам способом.