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IN THE MONASTERY OF SAN FRANCISCO, LIMA.

PERU

A LAND OF CONTRASTS

BY MILLICENT TODD

With Illustrations from Photographs



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"Qui peut dire où réside le charme d'un pays? Qui trouvera ce quelque chose d'intime et d'insaisissable que rien n'exprime dans les langues humaines?"

PIERRE LOTI



Peru, A Land of Contrasts

INTRODUCTION

Any statement regarding Peru implies a contrary statement equally valid. Contrast is its characteristic quality, true as to the general aspects of the country and ramifying through remote details. It is the obvious point of view from which to study Peru.

The three parts of this book—the desert, the mountains, the jungle—are the three natural divisions of the country. The shore is a long, narrow desert, much diversified. In a fertile valley intersecting it lies Lima, The City of the Kings. The river has come from the Andes, on whose lofty tablelands, called jalca in the north and puna in the south, flourished remote civilizations filled with mystery. Beyond the mountain barrier lies the jungle, geographically the largest portion of Peru,

and like all other jungles a region of dread and fascination.

Peru is a low country lying under a mild sky; but above are the mighty Andes freezing under arctic blizzards. The desert is barren for lack of rain; beyond the mountains, the over-productive jungle is saturated with tropical downpours. Along the shore thunder-storms are unknown; up on the icy tablelands of the cordillera, whose volcanoes are sealed with snow, lightning rips open the mountainsides. Fire splits, and water smooths. Mists are strong enough to magnify and the sky is clear enough to do so. The *puna* is a land of brutal elements, yet there is found the little chinchilla, protected with softest fur.

On the coast, overhead calm is counterbalanced by subterranean fury. "All geological phenomena are still in active operation," the shore rising, earthquakes changing the face of the earth, and underground rivers dodging beneath a desert sterile for want of the water which they are hurrying off. The people who live in this country of volcanoes and earthquakes feed on red peppers.

If lack of water prevents the heat of the sun from making the desert productive, so cold prevents water upon the mountain plains from encouraging vegetation. In the jungle luxuriance of all growth conceals any single benefit. Nature erects barriers everywhere. She has surrounded her richest gifts with almost insurmountable difficulties. Fertilizers come from the desert, a realm of death. Mines of the Andes coldly hoard their riches under a lifesucking atmosphere. Agassiz said: "An empire might esteem itself rich in any one of the sources of industry which abound in the Amazon valley." But these are inaccessible from their very quantity, and they shut in beneath them a fever-laden air. Where there is most fertilizer, the land is most barren; where there are most precious metals, it is most incapable of supporting human life; where richest, it is most difficult to cultivate.

Such is Peru. Elements and forces contrast; each combats each, and all attack man. Nature wars against herself: tropic heat, arctic cold; heavy, poisonous jungle mists, thin air of the mountain-tops; scorching dryness, reeking wet.

Even obstacles contrast in Peru. Man is threatened everywhere by elements, by insects. He drowns here or dies of thirst there. He can even be overcome by cold or sunstroke in the same place.

Peru is a land of violent extremes. It has a range of mountains as great as any in the world. The towering peaks are too high to climb. Far above circles the condor, the largest bird in the world. Peru is the source of the world's greatest river system, whose luxuriant forests are too thick to penetrate. The only representatives of a lost geological age inhabit them, as well as the biggest snakes and the smallest birds. Peru has great mineral deposits in the mountains; it also has rubber in the forests. Wool is produced on the frozen plains, and chocolate in the deep gorges lost among them. And from the valleys intersecting the desert come cotton and sugar-cane.

All kinds of obscure substances are found in this versatile country, ipecac and cochineal, cocaine and vanadium. Not unlike the rest of the world, chill here produces fever, but quinine, the best remedy for the disease of

contrast, comes also from the forests of Peru.

Although nature is a supreme fact, its natural history is not the whole of Peru. And contrast as a method of interpretation does not fail for its other aspects. Though man seems to play so small a part, he has lived here since antediluvian animals wandered among coal forests on the Andes. To the charm of limitless nature is added the mystery of great peoples destroyed before they were known. The riches of the Incas and of the glittering, vice-regal Spanish days, when continents were found, taken, and explored, contrast with present poverty. Consistently throughout, the riches of Peru have impoverished it. Its gifts have caused its ruin over and over again.

Wars and rebellions have riddled the country, and bull-fights have filled leisure hours. Though audacity of action has fascinated historians of Peru, its periods of peace have in them even more of romance: a nation of slaves ruled by a monarch-god; oriental splendor of Lima shining because of forced labor in the dark, suffocating mines; Arab blood in the con-

querors' veins penetrating the quiet Indian people, adding a keener edge to their sufferings. The poverty of the present-day Indians contrasts with lavish nature, "beggars sitting on a pile of gold." Contrasts of nature, of people to country, of antiquity to the present — these diverse elements are insistent wherever one turns.

The charm of contrasting facts is puissant. Almost any one of them might be the text for an allegory. To guard against rhapsody, I have documented every statement made. Conservative authority can be given for every fact, however fantastic, however trivial. The few legends are in a sense also facts: "Une légende ment parfois moins qu'un document."

The tellers of Peru's story deserve a history themselves. First came the falcon-eyed missionaries of Spain, sword and rosary clattering beneath priestly robes, to subject the Indians to salvation, or mercifully to condemn them to death by torture. Had they been less conscientious in describing all those quaint beliefs and idolatrous practices which they came to stamp out, we should perhaps have missed the chief source of information in regard to the

Children of the Sun and their dependent peoples. Military writers and official chroniclers followed in close order. It took them some time to recover from their amazement at this land of "gold, silver and pleasant monkeys." They wrote with convincing emphasis, "Wee that live now at Peru . . . finde not ourselves to bee hanging in the aire, our heades downward and our feete on high." On the contrary, they discovered that they were even "as near unto heaven at Peru as in Spain."

Explorers and adventurers of the seventeenth and eighteenth centuries were in the forefront of writers of romance. Such authors have always found inspiration here. From Marmontel to the *Peruvian Tales* of Guenelette, from Frank Stockton to José-Maria de Heredia, chiseler of faultless cameos, who himself came from a dramatic land of Spanish conquest, Peru has been a word to conjure with. But invention has added no glamour to history. It cannot keep pace with fact.

Accounts by various travelers of past centuries, voyages of discovery and reports of treasure fleets are followed by the students of to-day.

Scientists write of Peru, each authority finding his specialty accented. The geologist cosmic forces in active operation still. The anthropologist studies untouched savages in the morasses of the Amazon, the naturalist's wonderland. Archeology now has an exciting preëminence. Cool authorities admit the amazing antiquity of Peruvian ruins. The historian finds a great barbaric civilization; the economist ancient systems of state policy; the prospector an extensive system of navigable waterways. The mining engineer discovers inexhaustible mines, and the agriculturist unique opportunity, where the uplands of a farm lie among snows, its lowlands under rubber groves and orange trees. All write of Peru, and an increasing bibliography affords easy access to every sort of statistics. I have referred to a wide range of authorities, many of them cited in an appendix, to supplement my own observations, made as member of an astronomical expedition, during a stay of several months in Peru.

A painstaking person while in Peru wrote a journal containing all he saw. Not an event [10]

or an observation escaped chronicle. But on reaching home he discovered that his really poignant memories were not in his journal. His entries, though conscientious, "were but the ingredients. They were not the secret of the philtre."

Facts make their own appeal. But direct assault is not the only means of approach. Sometimes subtleties are best observed by looking at something else. It is often easier to see the beauty, the full glitter and glance of a thing in another object, as the play of colors in the aurora borealis is better perceived by turning the eyes aside. Sometimes one or two minor points chosen from an embarrassment of interesting details are all the imagination needs, as a plant selects only those elements from air and soil which can be used in perfecting its tissue of stem and leaf and flower.

It can only be hoped that this book about Peru may succeed in even suggesting its unique appeal.



PART I

IN THE DESERT

"I love all waste
And solitary places; where we taste
The pleasure of believing what we see
Is boundless, as we wish our souls to be;
And such was this wide ocean, and this shore
More barren than its billows."

SHELLEY



CHAPTER I

ALONG SHORE

The surface of the ocean is unruffled. Only the heaving of its great body suggests the power beneath. But when it confronts the desert cliffs, backed by the world-weight of the Andes, the force which has been gathering all the way from Australia, so mighty that it can be compared to nothing but itself, snarls into uncontrolled fury, rebellious, but acknowledging the limit of its power.

The "Peaceful Ocean" lies next to a land of geological unrest; the coast rising, subterranean torment breaking out in earthquakes, hurling cliffs into the sea. Even the busy modern port of Callao partakes of the mystery of this elemental land. The white ships anchored in the clear water of its harbor gradually turn dull brown. Might it be the crater of an extinct volcano?

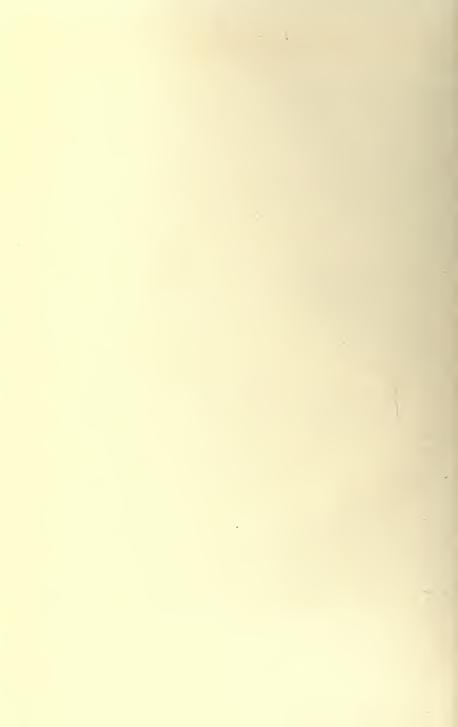
No wonder the people on such a shore build [15]

bamboo cages plastered with refuse and mud to live in, temporary for them as the present stage is transient in the history of the land on which they live. Their object-lessons are warring natural forces. No wonder they are brutal, slinging cattle on board steamers by the horns, casting a stone between the eyes of a bullock to make him turn around. Even their little children play at bull-fights with horns of defunct cattle. The soil of this "sea-gnawn" shore affords not one necessity for human existence, not even a drop of water. There are no real harbors, only niches in the jagged coast. But few lighthouses indicate danger, and the desert is chilled by winds from the Antarctic pole.

Far out, a low cloud is skimming the surface of the gray water, advancing in waves of blackness. From one end a shower falls; at the other, a column rises from the water to meet the on-rushing mass, "a great oval, rolling forwards over the sea." It comes nearer and nearer, till the shore shimmers as through heat waves. The quiet is complete except for the noise of millions of laboring wings.



SEALS OF THE PALOMINOS ISLANDS.



ALONG SHORE

A cloud of birds! Now they fall to the water with close-clapped wings, hundreds at a time, each a tiny splashing fountain. Their hunger is insatiable, but not because food is lacking, for the swarms of pilchards beneath the waves are vaster than the armies of birds which pursue them. Ancient Indian races enriched their irrigated fields with these little fish. A curious, tawny jewel is found upon this shore, known as "fishes' eyes." Might they be fossilized eyes of those fertilizer-fishes?

The appearance of this coast could not have been different in antediluvian days, with the screeching birds and the mammoth terrapin off-shore, those associates of the dodo.

The birds fly out at sunrise and spend the day in fishing, resting upon the waves when they are tired, and at sunset return to their giant stone islands for the night. Alone, the call of a sea-bird would be lost in the fury of the meeting of cliff and sea. But as a mass of white gulls can assume blackness by mere quantity, so their mingled voices can take on an overwhelming poignancy of sound. Louder than the crash of breakers, louder than the barking and snort-

ing of the bald, fat seals loping over them in droves, surges the great cry of the birds, as, in a shower of wild calls diverse as themselves, they settle upon the rocks: pelicans, cormorants, mollyhawks, gannets, sea-mews, gulls, osprey, occasional tropical flamingoes lost among ice-birds and stormy petrels, wild ducks, Inca terns, and the weird, amphibious "bird-child," which tries to stand erect, fluttering its cartilaginous wings, braced by its indistinguishable tail. All the birds of the ocean gather here, from sandpeeps to albatrosses, a surfeit of life to accentuate the barrenness of the shore. They are multiplying every year their already limitless myriads, useless to man as the savages of the interior, without commercial value now of any kind, yet not annihilated on that account. It is said that all are souls of sailors lost at sea. In each stormy petrel a lost apprentice lives again, in each pelican a boatswain, in each mollyhawk a chief officer, in each albatross a sturdy old captain.

One is tempted to write of the romance of the sea-birds of Peru, if romance has in it any of the fascination of waste on a large scale, for

ALONG SHORE

like barrenness, waste must be on a large scale to be picturesque. Where is the impertinence of it so overwhelming as in nature—her spendthrift production of unused powers, and the daring of her destruction?

A German scientist, investigating the guano interests, reported eleven million birds on one of the Chincha Islands, for these are the guano birds, and these wild, craggy islands the Guano Islands, a jewel-casket of Peru, which now abandoned, emptied of its contents, stands wide open, staring vacant in the sunlight, that its owners may not forget its former fullness.

Under the stimulus of pure guano a plant will spring to mammoth dimensions, lavishing blossoms and fruit. Ancient races, even the foreign Incas, realized its magical endowments and made laws governing its use. But land enriched by guano into immense fertility lapses after a while, barer than before.

A few sailing ships, hoping to glean poor remnants of this accumulation of the centuries, still huddle as close as possible to the black rocks, which, because of the quantity of that very fertilizer which has distinguished them,

are made repellent to life of any kind. In this laboratory of the strongest fertilizer, there is not the slightest trace of vegetation — Peru in paradox.

The sunset blazes through the fissures and shoots shafts of opalescent light under the great stone bridges toward the mountainside of the candelabrum, veiled in a hazy shimmer. Defiantly gorgeous it is, all but the young moon which nestles among rushing scarlet and black clouds.

A giant candelabrum, at least four hundred feet long, is hollowed deep in the rock of the sheer volcanic headland above the sea. Its trenches do not fill with drifting sand, though the natives of Pisco make periodic pilgrimages across the bay, just to be sure. Some think it is a sign of royalty, a flaunt of the Incas, or the boundary-mark of a conquered kingdom. Some say it was a warning made by the Spaniards after Pisco was sacked by English free-booters in the seventeenth century, for though now over a mile inland, it was then a coast town. Such is the equilibrium of the Peruvian coast! Others call it "the three crosses," the

ALONG SHORE

life-penance many years ago of a Franciscan friar named Guatemala.

But a symbol does not for mere inquiry give up the secret of its hidden mystery. Doubtless the origin and purpose of the Candelabrum of Pisco will never be known.

A few small, square, purple shadows mark a town, put down at random in the desert beside the sea. Some houses are made of the ribs and jaws of whales. A conspicuous white building, a little removed, is for sufferers with bubonic plague. Crosses surmount hummocks round about the town. People are making pilgrimages to and fro. And over all, white-headed vultures are wheeling. They spread their wings and cry in the silence.

Dust covers the little city, clustering about a market-place of sand. A fountain without water mutely occupies its center. Lamp-posts without lamps surround it, and the mud houses are without windows. The cathedral towers have no bells. Strange plaster figures are sculptured upon the façade, and infants with hands put on backwards hold up the portico.

Beyond the door with a two-inch keyhole are Virgins in pink silk and gold tinsel, saints with rows of parallel ribs, angels with gauze wings, towering altars of gingerbread work, artificial flowers, and silver-paper fringe.

Glossy-haired women, their black mantas (head-shawls) thrown back, drag stiff skirts through the dirty sand. Half-naked children gnaw at the inside of long bean-pods. Mangy dogs with dusty skin and a sparse sprinkling of yellow hair slink into the shadows. Black goats and their attenuated kids search about in the sand for something to eat. Men and women file out of black interiors, carrying gourds full of brilliant edibles. Meal braizes over a low fire on the sand; a woman crouching over it whips the flame with the end of her long hair. From time to time, to make a brighter blaze, she picks up pieces of wood with her strong toes. Near by struts a blue-eyed bird. It is a huerequeque, the household scavenger. Bits of cloth hang about his tall knees. The woman explains that they are trousers intended to keep him warm. She is sorry I could not have come a few days later, for she is about to make him

ALONG SHORE

some new ones for summer, of lighter quality, with lace edges.

The market is held in the bed of a "river," no less dry than the surrounding desert. Old women behind piles of tropical fruits, guayabas, pacays, ciruelas, gossip to a whir of small mandolins. Heavy-browed men in flapping sombreros drink thick liquids and purchase pats of red and yellow picante (a highly seasoned dish). Groups of pack-horses with silver bridles are tied round about the market.

But surprises are lurking in these coast towns. Behind heavy, unexpected doors, the single affluent family of the town receives in a peacock-blue salon. There is a lady in brown, with trimmings of blue velvet and cotton lace, and a perpendicular yellow hat. Another is in purple velvet, with swan's-down hat and photograph brooch of her sister. A third, wearing green velvet, a salmon colored hat with red roses, and holding a pink silk handkerchief embroidered in lavender, sits purring beside her red-faced German fiancé. The carpet is red, the furniture covered with brown brocade; there are statues of carved alabaster with gilt

edges and pink cuspidors. Gold mirrors, chromos of Venetian court life, and pasteboard calendars of bygone years hang upon the walls. The Spanish tiles of long ago are painted over.

Farther up the street a door may open upon a wilderness of vicuña rugs as tawny as a lion and softer than moleskin. Shawls of tancolored wool, silkier than Liberty fabrics, lie about. One is not surprised that vicuña wool was reserved for royal use in Inca days, nor that blankets of it were sent by the conquerors as offerings to Philip II. There are little footwarmers made of vicuña fur and chinchilla skins, wiry penguin skins and a deafening noise of singing birds in cages. A black-eyed girl with hair like tarred rope stands making cazuela (a thick soup) and paring guavas. She claps her hands, and many doves fly in to peck the crumbs from her lips.

CHAPTER II

DESERT QUALITY

A CERTAIN herb lives for years underground in the desert; it feels no necessity for a leaf-existence. Yet if the parched roots are reached by water, they expand toward the sun in lovely bloom.

Up from the shore stretches the bare immensity of desert, ending in one tremulous horizon with the ocean, and with the wilderness of mountains against the pulsating sky at the other. It is the Land of Light. All sensation of color is lost in this great sensation of light, an ardent light "shining through things, not on them." Even the clouds expire from excess of light. It reduces all colors to mere hot vibration. The translucent mountains swim in a sea of light, reflecting from it as from wide stretches of water. Though sensation of color is lost in light, their huge forms are distinct

in the radiant atmosphere, but unreal as if half-veiled. — One attribute of mirage is absolute clearness of outline. — Insignificant details emerge, but they rouse admiration only because of the light investing them.

The whole wide desert culminates in illusion and mystery of distant outlines. Everything floats in it, as it sweeps over from the opalescent mountains. A cross in the midst of the shelly sand, "protruding through thin layers of mirage," marks the spot where a greatly feared bandit was killed. Skulls are heaped beneath it, with matches and half-burned candles.

Water being denied, the desert is soaked with sun. It is the Land of Heat. No plant grows in the scorching soil, no animal can endure it. No bird, no insect flies through the burning atmosphere. Each object shimmers until it seems but the reflection of itself. Fire descends from the burnished sky and vibrates in the air and scalds the sand. Yet concentrating a tropical sun, this hot solitude lies between the cold ocean and the mountains, a region of ice.

This desert is the abode of weird phenomena. Sometimes a globe of fire springs to the size of

DESERT QUALITY

the sun, illuminating the sky for a quarter of an hour; then it dissipates into an infinitude of stars, which wriggle off into bright little tails and disappear.

A slowly moving company, muffled to the eyes, with heads done up like Tuaregs of the Sahara, mincing across the desert on donkeys, suddenly see themselves swinging along over their own heads, as if magnified by a gigantic mirror in the sky. The clouds give back strange pictures of one's self enlarged and surrounded by a halo or a circular iris, summoning a saint or revealing a fairy. This quality is inherent in Peru, making ordinary moments ornamental.

Near Casma is a hill called "Dreadful," whose continuous sandslides when the heat is greatest give off a sound of mystery, suggesting heat, like the roar of a distant volcano.

No matter how much the political status of Peru may change from century to century, it remains always the lair of earthquakes. Mines of gold and silver, islands of guano, deserts of nitrate, may be in turn discovered, exploited, exhausted. Earthquakes destroy those who have been enriched as those who have lived

beside them in want. Even now earthquakes are almost daily recurrent along the coast. In laying your ear to the ground you can hear subterranean rumblings. Only in the frequency of slight shocks do people feel secure; otherwise they know the underground world is hoarding strength for a fury of destruction. As a traveler of the old time expressed it: "The inhabitants are subject to being buried in the ruins of their own houses at any time."

The Indians say that when God rises from His throne to review the human race, each step as He progresses is an earthquake. As soon as they feel the pressure of His foot upon the earth, they rush from their huts to show themselves to Him. When the rumbling becomes loud enough to be noticeable, dogs howl, beasts of burden stop and spread their legs to secure themselves from falling, people rush to doorways, and churches are emptied in an instant. Reddish mists steam from the sea, bad odors from the earth; distant thunder — complete wind-stillness. The clouds of sea-birds rise from the earth and fly high, watching an agony in which they have no part. Then a frightful

DESERT QUALITY

crash, rocks are torn asunder, great masses fall off as islands into the sea, which is still. But soon it turns black, boiling with a smell of sulphur, and many dead fish float about.

Omnipresent, the earthquake is a mystery which no laws can govern, beyond man's comprehension or control. One never gets accustomed to it. Horror at a first shock only increases with further experience. Earthquake is linked with freaks of nature; it lifts up a ridge across the bed of a stream; it alters the face of the earth so that lawsuits spring up over changed boundaries. It vitiates the soil. Blooming fields wither, crops are lost, and cattle die from eating the scorched grass. The fiery core of earth is nearer the cooled surface than we imagine. But here at least there are no "torments from heaven." In Peru it is said that lightning is worse than earthquake, emanating as it does from God's own realm.

Even the climate of the coast partakes of mystery. The clouds hurrying from the Atlantic have drenched a whole continent of jungle in tropical downpour, and before they reach the desert, their last drop of moisture has

been wrested from them as snow — drained dry by the Andes. The tropical sun heats, and the Antarctic current bringing its icy winds, cools. Sometimes one predominates, sometimes the other. For the red-hot desert can also be cold! The low-hanging garuas, the ocean mists of half a year, chill the desert and cling to the base of the mountains, fading lighter and lighter up and away from the black rocks where white surf is breaking. Such are the facts of the case, but it has been thought that the original god, Con, was responsible, for once in anger he deprived this desert coast of rain.

The desert is majestically empty, a great "vision of nothing without perspective." Yet its mere emptiness suggests breadth, backward and forward, up and down, both in time and space. An unheard silence lies between the empty horizons, perfect except for the "great, faint sound of breakers," the tumble of an unused ocean of water, which destroys without moistening the desert shores.

It seems lifeless. Harmless and peaceful at least, it presents nothing to be destroyed by sun-blight. It remains, as it apparently always

DESERT QUALITY

has been, the realm of death — though even death presupposes life before it. But disturb the desert, and a thousand forces spring into action, furiously attacking the intruder. The heat of the sun assumes a ghoulish love of destruction, and at night the stars look down upon a creature shivering with fever, reeking with wet in this desert place. Possessing all fruitful ingredients within and kindly elements without, the desert sleeps. It needs only one thing to burst into life.

A mysterious river springs forth full-grown. From what glacier or clear, icy fountain up on the frozen puna may it not have issued? And then, after a mysterious incubation, it returns to sparkle here in the light, and in the leaves and flowers which the dampened earth is ready to produce.

There are traditions that sometimes a vagrant shower escapes from the magnetism of the mountain-tops. The flowers waiting just beneath the surface spring up like bloom over the June earth. The water was a shower of bluebells! A fugitive vegetation greedily spreads, quickly as it disappears with the pass-

ing of the water. In some places cotton grows to the height of a horse's head, a luxuriant crop, too unexpected for harvest. This brilliant life lasts a week, perhaps more, and then lapses. Where do the slumbering flowers conceal themselves? Where, indeed, does the pansy get its coloring matter?

The desert of Peru is varied: toward the south the coast is strewn with borax, white upon the cliffs; toward the north petroleum gushes from beneath it. Upon the red plains of Huacho are the salt lakes of Pampa Pelada, reflecting the sun in a thousand colors. "White dust-whirlpools dance on its white floor." Its banks are scattered with the bones of animals which have come there for salt, and its perpendicular cliffs are haunted by flesh-eating birds. There, gnarled gray shrubs "loom as if carved out of clay." Beyond, the desert is coated with nitrate; yet here it seems but pulverized bones, beneath acres of white skeletons bleached by a thousand years — gaunt testimony to its desertdom since prehistoric Indian races struggled to make it blossom.

In the Pampa of Islay the desert takes on a [32]

DESERT QUALITY

terra-cotta hue. Whirlwinds progress from hollow to hollow. Above the purple mountains, shading away from the red desert, bright blue peaks are snow-covered to set them off from the sky. Fog shadows drop darkness here and there over their barrenness. Even the mist has a poetry of contrast.

Across the plain a constant ocean wind sweeps fine white beach-sand along with waves of color, no less real because impalpable. Its pilgrimage of a thousand years toward the mountains is uninterrupted, for the wind blows always from the southwest. It causes the rippled waves of sand which it brings along to assume in traveling a crescent shape — the wandering *médanos*.

Sometimes larger dunes overtake smaller ones, which, so absorbed, become firmer in shape as they journey toward the mountains. Should two collide, they are shivered, then blend in a new crescent, usually to separate again.

Growing from a network of roots within the moving dune, the snowy heads of a small plant maintain themselves just above the sand as it drifts over the hard plateau.

The *médanos* are scattered as thickly as the crescent shadows of some vast eclipse, a labyrinth of nature. They are as mysterious as "mushrooms growing in rings, marsh-fires which cannot warm, or the shrinking of the sensitive plant."

The sand drops constantly over the acute crest. From all about come soft sounds, an overwhelming minor music, almost inaudible. Were you in a forest, you might think it was the soughing of the wind through the branches or the shuffle of locusts devouring a tree.

These playthings of the wind have been called symbols of the Moon in the land of the Sun, since nothing in Inca days could dissociate itself from either; a crescent Moon humbled by the Sun's anger, allowed to possess her former fullness but a day at a time, doomed to be obliterated over and over again.

The worth of anything consists in the fact that through it can be seen something more beautiful than itself, something to which it forms the setting. Words are mere points of departure. What limitless excursions can even one word suggest, into countries more wonderful



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DESERT QUALITY

than any created by a remote if consummate artist! And what an intimate happiness is found there, which no one else has felt nor could describe if he had!

Wherever rivers descend from the mountains, green garlands are slung across the desert. No wonder the river was a god to the desert-dweller, bringing with it meadows and gardens. Where only dust has been, acres of cotton, bright-green sugar-fields, and dark orchards lie between mud walls and willow-shaded lanes. Herds graze upon alfalfa steaming in the sun. The yellow plaster terraces and balconies of haciendas among their banana groves are shaded by cascades of glowing bougainvillea. But wherever water is, fever follows. Disease clings to the green spaces. Even sickness cannot abide in the desert alone.

Huge, pyramid-like mud structures spring crumbling from the soil whose modified form they seem to be, temples and palaces of former days, each with its legend. The ruins are inhabited by weird iguanas and "haunted by those birds of ill omen that only nest in ruins."

Mounds of treasure, too, linger along the desert, and fragments of the paved road of the Incas.

A gold bell was once buried in Tambo de Mora. Older people have heard it tolling on quiet nights. Some say it rings from the top of a hill, some, from beneath the ground. To be sure, bells were not known to ancient Peruvians, yet a company was properly financed to hunt for this bell of gold.

Submerged or enchanted cities exist on every hand. A mystic race of dwarfs live in the Andes. They guard a vault of buried treasure. An Indian who declared he had seen it became so terrified at the extent of the riches that he fled, not forgetting to mark his path. Yet frequently as he had followed the trail to the very spot, he could never again find the cavern of glittering jewels: it had sunk completely out of sight — "You can see for yourself, Señorita, that it has, if I take you there!"

Legends of prehistoric days take on the garb of myth, when giants came over the sea to Peru long before the memory of man. Wishing to provide themselves with water in the desert, they excavated enormously deep wells, still

DESERT QUALITY

undeniable evidence of their dominion. Moreover, their bones of incredible size have been found. Garcilasso says a piece of one hollow tooth weighs more than half a pound. Their footprints have been traced as far as Patagonia. For their sin they were destroyed by a rain of fire.

Maui, too, — the Polynesian god who caught the sun with cords of cocoanut fiber, who lifted the sky and smoothed its arched surface with his stone adze, who made the earth habitable for man and then created him, and who now divides his time between fishing for islands with a hook which is called the Plume of Beauty, and resting in the form of a small day-fly upon the under side of a flower, — Maui, who belongs to the length and breadth of the Pacific, once visited Peru.

Upon this coast lived aborigines with flat noses, fishing from boats of inflated sealskins, and sleeping pell-mell in sealskin huts on heaps of seaweed, "tall, cannibalistic fishermen . . . who used bone utensils, made primitive pottery, nets, and fabrics of osier."

Here lived the contemporaries of the Incas, [37]

Yuncas they were called, "dwellers in the hot lowlands," distinct from those of the highlands, with their hideous thoughts painted on earthenware jars, and their hazy conception of a single god, their pragmatic worship of him by means of anything which he had made for their support and comfort, and their sacrifice to him of his greatest gift, human beings.

Fancy is free to play along geologic or human history. Bones of mastodons as well as seabottom shells are found in the desert. Vanished races have embellished it in passing. Man has but added to the mystery of nature. Yet after such lapses of time the two are mingled indistinguishably.

CHAPTER III

DESERT PERSPECTIVE

THERE was once a mine of gold in Peru. Later it became a copper mine, and now they sell the water that collects in the bottom.

Ι

The Incas found a rainless desert intersected by fruitful valleys as to-day, each independent, with its own gods, its own king, its own manners and customs, even its own diseases! Each valley chieftain lived upon a platform among the fields, but his villagers lived in the desert, not to encroach upon land capable of cultivation. These Yuncas excelled in the arts of weaving, fashioning metals, and in making pottery.

In the name of the Sun the Incas descended from regions of snow to conquer the desertdweller, with lofty disregard of the fact that

the benign source of all blessings among the high table-lands was the scourge of the lowlands, where water-gods were worshipped. religious wars changed the face of the country. Valleys were connected by a great highway. Sun temples and convents for the Virgins of the Sun supplanted the shrine of each valley's chief god. Only one remained inviolate on the whole coast, that of the awful, intangible Pachacamac, who, being a fish-god in his great red temple by the sea, was not an idol, but the Invisible, Unknown, Omnipotent God, who had existed before either the sea or the sun: Pachacamac, he who formed the world out of nothing, the Creator whose image they dared not conceive. His name was mentioned with shrugging of shoulders and lifting up of hands, and he was served with fasting. Unlike Sun-ritual, his cult was a personal one, the inner worship of a people who paid tribute to golden fishes. The Maker of all Things had been conceived by those ancient peoples who, Balboa says, came from the north on a fleet of rafts, when the mountains had the climate of the valleys, and the whole actual coast was under the ocean.

DESERT PERSPECTIVE

The aura of the Unknown God invested the fish-idol, and the temple was held in such awe that it was not only spared by the Incas, but they even made pilgrimages to the shrine. Shy in the thought of offending the Maker of the World, Inca Yupanqui allowed his golden seaside temple to remain, but erected a temple to the Sun a little above its level. To honor the conqueror, the priests of Pachacamac "appointed a solemn fishing of many thousand Indians, who went to sea in their vessels of reeds."

Though the fish-idols were ejected, and a convent for the Virgins of the Sun was founded, worship of Pachacamac went on as before. The Incas joined in it, identifying him with Uiracocha of the mountains, but they extorted Sun adoration as well, a fair barter of faith.

Then the priests of the Sun made an idol of Pachacamac, and so it presided until, drenched with sacrificial blood, it was chopped to pieces by Hernando Pizarro and twenty soldiers in January, 1533. A terrible earthquake followed, which Pizarro called the devil's rage, and triumphant he planted a cross above the looted temple. Pizarro gave the golden nails

to his pilot, as a reward for his entire venture. But much of the temple's treasure is said to be concealed underground, undiscovered to this day.

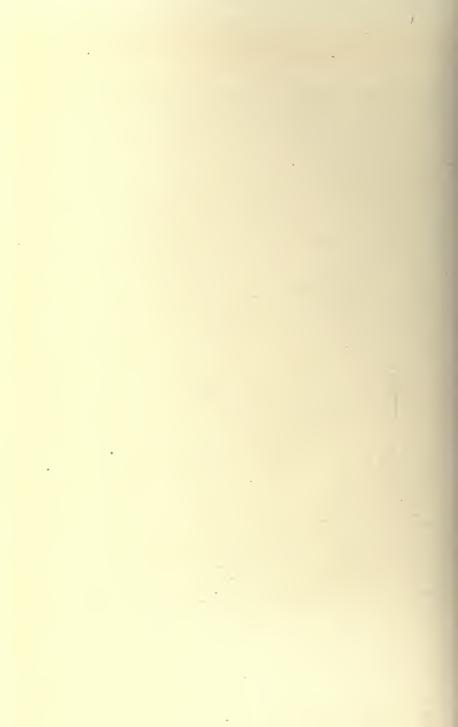
The temple pile glows against the blue sea in the midst of shimmering sand. Pachacamac lies in its magnificent ruin surrounded by acres of skeletons. For more than two thousand years it was the most famous burial place of the coast. Even mummies were brought from great distances to lie in the sacred ground.

Layers upon layers of succeeding generations have all yielded their excavated secrets, each throwing light on others. Time and treasure-seekers have laid bare the most recent. Histories of great peoples told by their graves!

I stood upon the summit of the broad mound, the temple to Inti, the Sun, built by the Incas above that of Pachacamac, the fish-god. Its crumbling walls, with traces of their brilliant coloring, ended abruptly in mid-air. The headless skeletons of forty-six young girls had recently been found upon the terrace where I stood, the braided cords hanging loosely about their skeleton necks.



PAMPA DE LOS HUESOS - THE FIELD OF BONES.



DESERT PERSPECTIVE

Far below stretched the vast field of the dead. I looked out over a desert of round white skulls, with eye-cavities staring at the sun — Sun-worship continued in death. Little flurries of dust rose here and there, as men with shovels turned over the sand, hoping for treasure. Gallinazos, hideous vultures of the desert, paced up and down. Below the convent of the Virgins of the Sun, whose niches only remain, was a small blue lagoon under palm trees. On its reed-edges a white heron tilted about — a curious, gnarled creature, giving an impression of majestic grace.

Between me and the sand-hills rolling up to the Andes lay the silent courts, the great, roofless houses of the city of the dead caving in over its streets of sand. The desert-river separated this sepulchral spot from the valley of Lurin, where cotton-fields and yellowish expanses of sugar-cane were divided by willow hedgerows, with glimpses of water beneath tall mud gateways. The breeze was as sweet as heliotrope hedges could make it and filled with tinkling bird notes.

On the other side was the whole reach of [43]

the sparkling Pacific, with its far-off sound of breakers. There is a tradition that the two rocky islands are a goddess, Cavillaca, who cast herself and her child into the sea a thousand years ago. But scientists assure us that the islands were torn away by an earthquake since Spanish occupation. The Incas, they say, had a temple on the islands, then a promontory.

He has not beheld the quintessence of all human suffering who has not seen the face of a hunchback child-mummy. Upon such bodies, doubled up and tied securely into the smallest possible space, whose varnished skin is stretched over their unbending bones, even the tattoo marks still show in designs of their owners' choosing. They are clothed in finely-woven garments, with sandals, pouches, shell and bead ornaments, embroidered bands, and hair not vet unbraided. Sometimes brilliant eves stare from empty sockets in the withered mummy-faces, eyes of prehistoric cuttlefish, a symbol of fish worship. In some of the skulls are dents made by blunted points of stone weapons.

[44]

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One mummy sits in the attitude of a toper about to drink, with a monkey on his shoulder—for pets of the dead man accompanied him on his journey, his dog or parrot sometimes mummified at his feet. The men have their slings and fish nets, the women their spindles, needles of cactus thorns, and every implement of household use, the children their earthenware dolls. All have their little gods and talismans. There are pots of provisions, too, with lids to keep out the thin finger of time, jugs of chicha (a beverage distilled from maize), and ears of corn in nets from which they have never been removed since they were put in by hands turned to dust a thousand years ago.

From the grave of an apparently great official with his treasure-jars, was taken only the mummy of a puma, yellow feathers on its head, a gold plate in its mouth, gold and silver bangles on its legs. It had a necklace of emeralds from the north, and its tail was full of golden feathers from the mystic jungle beyond the mountains.

Recently X-rays have been applied to mummy-bundles, which show other skeletons

within as well as the one who had died, skeletons of those who, when those winding-sheets were adjusted, were still alive. Gruesome sacrifice!

Pachacamac has furnished museums all over the world and is still one of the most inexhaustible of mummy supplies.

My horse descended carefully to this field of the dead. He picked his way across stepping-stones on which pilgrims approached the lower court of the temple where their year of penance before entering was to be spent. A step, and there was the sound of crunching human bones. Sand filled the skull cavities. They shattered like fragile glass as the horse's hoofs clattered across them toward the ruined city. The sand was pulverized bones. Bits of cloth and pottery attracted the collector's eye, or a deformed or trephined skull.

The city walls are twenty feet thick. Their ends and their beginnings are lost in sand. Marks of fire show here and there, and traces of forgotten industries. Flights of stairs lead down from the tops of walls, over which was the only entrance. The roofs were made of

DESERT PERSPECTIVE

reeds to let through necessary air and light; none were needed against rain.

Swallows, "dovelets of Santa Rosa," flew over from the green valley of Lurin. Bats and little owls, always in pairs, inhabited the ruins, and lizards basked in the blinding light and enjoyed the quiet. Under the cactus lying loose upon the ground there is sometimes a small black spider whose bite takes months to cure. Its inhabitants emphasize still further the uninhabitability of this scorching desert.

II

One other center of power confronted the Incas in the coast valleys, the city of Chanchan, belonging to the Chimus.

In the kingdom of the Grand Chimu, Si, the Moon, was worshipped. It appeared both by day and by night, which the sun was not able to do. The Moon raised the tides; did such power not demand sacrifice? On special occasions the Chimus offered to it small children wrapped in brilliant cloths.

The ocean was the medium through which

their Moon-god chose to demonstrate its power. As it nourished them with its fish, scattered by the fish-god Pachacamac through its waves, they strewed white meal upon its surface as a form of worship; incidentally to attract a large catch of fish. Ni, the Ocean, symbolized water, the greatest need of a desert land. It was also their only means of communication between the desert valleys, as they plied up and down upon the "silent highway" to collect tribute. Their boats were made of reeds tied together, and they sat upon them as on "horseback, cutting the waves of the sea, and rowing with small reeds on either side," as Father Acosta explains. Sometimes they had square sails of grass. One may see these boats of bulrushes upon the shore, for they are still in use, their long, curved beaks leaning against each other like stacks of mammoths' tusks.

The water cult of the Chimu included worship of fountains, flowing streams, and of their goddess, "She of the Emerald Skirts." The worst criminal was a water thief, he who turned the stream aside from his neighbor's field; and the Grand Chimu was overcome at last only

DESERT PERSPECTIVE

because the Inca was able to cut off his water supply. Mild Tupac Inca Yupanqui, who ruled the mountains as the Grand Chimu controlled the coast, preferred victory without bloodshed, since his were religious wars to spread the worship of the Sun.

Sun-worshippers and Moon-worshippers, living side by side, struggled in mortal conflict, but the Sun-worshippers prevailed; and when, after a few generations, the Spaniards, eager for bloodshed, came to conquer the Sun-worshippers in the name of Christianity, the great city of the worshippers of Moon and Sea was gone. They could glut their desire only on hidden treasure in sepulchral mounds.

Mochica, the language of the Chimus, was so difficult that no grown person could learn it. Here and there it was spoken as late as the seventeenth century, and to-day near Eten, "where the sun halted at his rising," there are elements of it left in a curious dialect, spoken by a little community of Indians whom no one can understand. They braid Panama hats of finest straw. Their huts are almost without furniture, they wear no shoes, and dress always

in mourning; but they wear flowers in their hair.

An Augustinian prior, Calancha, collected traditions of Chanchan, that great city of the Chimus which covered twenty square miles. He tells of the processions to the Moon temple, when the Grand Chimu, wearing the jeweled diadem, in robes of feather-mosaic as fine as warp and woof, was carried in his litter by courtiers, surrounded by musicians, minstrels, priests, and warriors with lances and long waving plumes.

The mounds scattered in fragments through the desert were terraced pyramids in those days, the walls upholding them brilliantly painted and richly embossed. Traces can still be seen of their paintings of wild birds and animals, and step-patterns like the pyramids themselves. Vines of the passion-flower drooped their fruit over the garden walls upon the terraces, for water ran to the very top. Even the avenues of trees had individual nourishment from the distant mountains through a lofty aqueduct, the most amazing accomplishment of an amazing people. In the labyrinth below

DESERT PERSPECTIVE

worked the designers, dyers, potters, weavers, and the gold- and silver-smiths, expressing the florid taste of the Chimus.

These sea-worshippers, fish-worshippers, made fish-gods of gold. In Chanchan their small fish-god has been found, worth three million dollars. With it were gold bowls, little figures of fish, lizards, serpents, and birds, neck and arm bands, scepters and diadems, and emeralds from the north. The larger fish-god is yet to be discovered. Manuscripts describe conscientious attempts to unearth it.

The race has vanished; vast Chanchan is gone. We are not even sure what this great people called themselves. Their gold and silver ornaments have long ago been melted into European coin. Traditions of their wealth and magnificence came only through their conquerors, who themselves had no written language. Were we to believe only Inca tradition, all the Yuncas of the coast were savages, given up to unnatural sin. Fortunately there are vestiges of their pyramids and labyrinthine interiors of their temples and palaces, bits of their pottery, and patterns of their

cotton fabrics. There are, too, fragments of their marvelous irrigation system, a dumb reminder to Peru that present needs were once supplied by the intelligence and industry of an Indian civilization.

A bush with many-colored clusters of flowers joined together like a bunch of grapes grows not far from the site of Chanchan. It is said that each flower has a different shape as well as a different color. The name of the bush is the "Flower of Paradise."

CHAPTER IV

PICA, THE FLOWER OF THE SAND

A TOWERING, scoop-topped wagon, fruit-filled, dragged by nine mules, lurched through the desert. Far in the distance, on the first low swelling of the mighty chain of the Andes, there was a faint dark line whence it came.

The driver of the wagon handed me a small branch of a *chirimoya* tree. The three narrow, fleshy lobes of the *chirimoya* flower lie close together among the pale green foliage and send forth a perfume as poignant, though faint, as if there were rain-drops for conductors. The aromatic, gently acid flesh of its fruit lies in rays, the exquisite scent of the flower tasted in the fruit. Warmed by the sun on its journey from the valley oasis, the whole freshness of the desert was condensed in this single flavor, like the crystallization of a perfect moment. Strange imaginings sprang from tasting it.

A gallop across the desert is a good prelude [53]

to anywhere, especially if one has silver bridle and stirrups and a long lariat with silver knobs. The muleteers sat upon high black saddles of alpaca hair. The colors of their mufflers must have been brilliant underneath the dust. Their trappings were embroidered in red with a redworsted fringe, Inca-fashion, over the mules' temples. Our little unshod ponies picked their way between the stones, up hill and down, over the roadless road to Pica.

The desert of Tarapacá, now belonging to Chile, is called the Plain of the Eagle. A fit arena for gaunt battles in former days, a road across it is now distinguishable by the bones of beasts of burden which have dropped on their way.

There are valleys of nitrate to explore, hills of nitrate to be climbed, plains of nitrate to gallop across, and the only break is one windswept tamarugo tree. Does it exist upon the morning mist which the sun disperses? Or does its tough life go on underground, like some uncouth monster in the depth of the sea? Or does its tap-root bore down into a deeply buried flow of water? Every one believes that

PICA, THE FLOWER OF THE SAND

there is a honeycomb of tunnels from watergiving strata in the mountain-sides, far antedating the days when Uiracocha went to Tarapacá.

No convulsion of nature is unknown to this pitiless land. Volcanic bombs lie about, and fantastic heaps of lava from molten mountains mingle with corals from the sea-bottom. Streams come to the surface, ripple for a short distance, and disappear. Their water tastes of sulphate of soda. Sometimes it springs suddenly from a cave, suggesting a system of underground rivers. Sometimes it is brought by water-works of prehistoric days, whose exact position is not known, making life possible for their would-be destroyers. Whether freaks of nature or remnants of the vast system of irrigation, importance enough has been given to the underground waterways of Peru to bring a scientist from the United States to chart them all.

Curious symbols and conventionalized llamas are cut into the hills of pink trachite and black slate rock whose strata have been jostled and overturned by earthquake. Pictures of ser-

pents, foxes, and birds endure through ages of merciless sun. Were they the work of a megalithic people of a megalithic age, when cyclopean stones were transported to build cyclopean edifices, and gigantic ant-eaters and other jungle-dwellers swarmed in this desert of Tarapacá? Their irrefutable bones are found here, but so are shells of the sea-bottom and waterworn stones of green jasper with red spots. Moreover, the nitrate is filled with the petrified eggs and bones, even the feathers of sea-birds, suggesting that the nitrate was originally guano. Why should it not be true? For this desert was once beside the sea, as it was once beneath the sea.

But the law of compensation works even here. It has always been common opinion that the desert of Tarapacá shelters fabulous riches. Lured by the glisten of a fallen meteor, men have squandered their fortunes and risked their lives searching for gold, while they trod the nitrate under foot.

The large dark cave was gently steaming. The water filling it gurgled out from sunless twilight, hot from the hold of the earth, cool as

PICA, THE FLOWER OF THE SAND

it spread over the desert valley from the mouth of the cave. A brown man and his little daughter, lying in it, were being waved to and fro by the water as it issued, just their heads visible. Saturating the bamboo tangle, it left a wake of gardens, orange and guava trees, citrons, figs, and slender paltas, tall chirimoyas and pacays, grown to fruit-bearing size in six months. Trees of the jungle bathing in incandescent desert light! There were thick mimosas, geranium trees, and darts of poinsettia, grape-vines a foot across at the root, and spikes of heavy-smelling tuberoses. Jasmine trailed on the trellis above my head, and bougainvillea made a roof of purple flowers.

The slope of the sand-hills was crossed in the foreground by shadows of orange groves, "indefinitely elongated." Domestic constellations glowed in their black foliage. Men in *ponchos* whirled up on mule-back, unbuckled their three-inch spurs, and flapped their saddles down. This time the mirage was real.

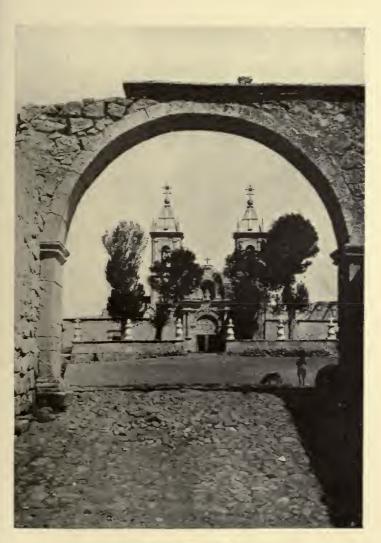
Old Dorothea came down from her bright green veranda, where the sunshine glistened from a humming-bird's wings as it hovered

above a passion flower, a whirl of black fringe with yellow deeps, the favored blossom which the Incas carried in their hands as a sign of greatness. She held a dove in the crotch of her arm and offered me a bunch of narcissus and white fleurs-de-lis, unthinkably sweet. She was dressed in yellow ocher and an old straw hat which she removed on being introduced to ladies. Her little earless dancing dog did a cueca (native dance) for us, while she clapped queer aboriginal time, and the gold hands danced in her ears.

Birds sang in the thorn hedgerows, and frogs croaked in the warm pool, frogs which die in cold water.

Dorothea said that some day the desert will again be covered with forests and gardens, as it was before it became a desert.

In a cloud of dust made luminous by the sun, a drove of llamas galloped down over the desert hillside to drink, soft eyes wonderingly looking out from tall fuzzy heads, legs bungling with heavy wool. An old Indian woman in Panama hat and brilliant blankets followed slowly, puffing at a pipe.



A CHARACTERISTIC PERUVIAN CHURCH

PICA, THE FLOWER OF THE SAND

This pool in a shadowed vale of the western Andes, a shady, sweet-smelling spot, lost in an immensity of desert, is a little solitude in the midst of a great solitude, hospitable by sweet

perfect pool for a tiny fish, where it will find its world and paradise all in one, with never an intimation of the dry bank.

A large butterfly poised gently on the water's surface. It was sunset time, the butterflies' drinking hour. A copper bell tolled slowly. The reverberation pierced far into the silence and was "prolonged by the whole surrounding desert." A boy perched on an overhanging rock was playing a flute. The frail sounds echoed through the quiet air, "hesitating within a silence almost too large." What can give such an impression of space as a flute? Or, in ceasing, leave such utter stillness? A gorgeous peacock preened itself against the crimson bougainvillea in the sunset, then folded its fan for the night.

It is curious how the atmosphere of a dream cannot be conveyed in words.

Sitting beneath the mango tree by a lily[59]

edged brook, I watched the low bonfire roasting desert quail and smelled the scent of heliotrope hedges, while I listened to an old man's plaintive song, mingling with a quiet desert waterfall. A wild youth with a bullet gash across one cheek told me of reckless escapades in the valleys above. He twisted off oranges with a stick of bamboo and dropped them into my lap, as the moon, poised on the crest of the mauvecolored Andes like a discus thrown by a mighty arm from beyond, disengaged herself and traveled upward. Moonlight, he said, is brighter in the mountain defiles. The moon sometimes drops a rainbow up there, a faint, round, dream rainbow, made of thin far-diluted sunlight. Pushed by a little breeze, it divides the cloud and disappears.

He pointed out the false Cross preceding the true Cross, preparing its way into the sky.

"Some violets have got in here," he said suddenly, tweaking one out by the roots. Intrusive violets!

A man with spurs passed *picante* and young kid and trays of fruit, their crevices filled with flowers.

PICA, THE FLOWER OF THE SAND

Was not Amiel right when he said that "Un paysage est un état d'ame?"

It was an "ambrosial night," in a place to attach affection, except that affection is not for places, either actually or in retrospect. One heart-beat faster, and the nitrate desert has fairy illusions. Why is it that merely seeing foreign sights leaves only craving, while a whiff of feeling in a distant, lonely spot fills one with the meaning and the mystery of everything and brings tears to the eyes of memory? The purple of the bare mountains is significant in the afterglow. Dripping water is significant. The moon sheds a different light. The heat of the desert sand just below the surface becomes suggestive. The air is filled with indefinable odors never perceived elsewhere, and the sight of a sand-colored bird explains all the secrets of the universe.

The beauty which alone would have woven a spell about the place merely lapsed into a background. In itself the voice was not faultless, nor the moon different from other windless, immaculate nights; but the air was sweeter, and the guavas were at the season's climax,

their one day of perfection. They tell you that if you eat guavas in Pica, you become either ill or enchanted; in either case you cannot leave.

He must have been talking for a long time. It was as if his voice had been beneath my range of sound, or too soft — though I heard well enough. All at once I began to understand.

"Perhaps you have heard of the bush which grows in Patagonia. It is covered with pale yellow flowers. When a match is placed beneath it, the bush blazes forth and is reduced to immediate ashes, all its strength exhausted in a single dazzling effort. It is called *escandalosa*.

"Had you let me know two weeks ago that you would come, I would have put a bit of nitrate on the roots of my rose-tree, and it would have blossomed viciously for you!"

"Yes," I said, "but afterwards?"

"Oh, to be sure. Then it would have died."

An owl screamed from the top of a *ciruela* tree, a little owl-of-the-desert, just a few inches high.

Pica, the Flower of the Sand! With what [62]

PICA, THE FLOWER OF THE SAND

golden words borrowed from Hindoo poets might not its charm be told? By what enchantment its suave breezes be recalled? Everybody knows it is a magic spot. Its quiet existence is a sort of self-expression of inmost thoughts without technique.

Doctor Stübel, the earthquake specialist, says Pica is an eruption center.

CHAPTER V

A CLASH OF CONTRASTS

Ι

WHILE the mysticism of the Middle Ages was expanding in delicate spires of Gothic architecture, the Inca's empire was exposing its heart of gold to the blaze of a tropical sun. Their only similarity is that a shadowy veil, half history, half legend, floats between us and them both. But the gold shines through, and the veil cannot conceal its brilliancy.

Once upon a time there was a garden of pleasure where flowers of gold opened from silver stalks, some full blown, others in close golden bud. Upon the walls crept strange insects and snails, so perfectly counterfeited in gold "that they wanted nothing but motion." Even the trees and the paths were of gold. Birds of gold perched upon golden boughs, their

heads thrown back in silent song, and upon silver leaves gold butterflies poised in the sunlight upon their little golden feet. Hummingbirds of gold sipped imaginary honey from long, golden flower-bells. The old chronicler, Cieza de Leon, says that one garden "was artificially sown with golden maize, the stalks, as well as the leaves and cobs being of that metal; . . . they were so well planted that even in a high wind they were not torn up; and besides all this they had more than twenty golden sheep with their lambs, and the shepherds with their slings and hooks to watch them, all made of the same metal." Near by were vast heaps of gold and silver, waiting to be wrought into wonderful shapes.

The Inca ate within gold-lined walls, sitting "commonly on a stool of massive gold set on a large, square plate of gold which served for a pedestal." He ate from gold dishes rare viands from distant provinces, prepared in gold pots and kettles in a kitchen supplied with piles of golden fagots! He bathed in cisterns of gold in water conducted through golden pipes from distant springs. Francisco Lopez says: "Nay,

there was nothing in all that empire (the most flourishing of the whole world) whereof there was not a counterfeit in pure gold."

As hunger could not be satisfied with gold, it was valued only for its shining beauty, esteemed by the Incas' subjects only as a symbol of the Sun, those "tears which the Sun has wept." They naturally belonged to him. His worshippers even cast them into lakes, mirrors in which he looks upon his own reflected glory, and "sinks at last still gazing on it."

The greatest of all Sun-Temples was Coricancha—the Ingot of Gold—where every implement in use, even to spades and rakes of the garden, was made of gold.

Huayna Ccapac had learned from the god Uiracocha that a superior people would conquer the Incas and introduce a new religion. They would come after the reign of twelve kings; and "In me," he said, "the number of twelve kings is completed."

Oracles had predicted their coming. And what was more significant, the great oracle of Rimac, "nothwithstanding its former readiness of speech, was become silent!" Omens had

foreshadowed them. A brilliant comet "struck Atahualpa with such a dump of melancholy in his spirits that he remained almost insensible." A royal eagle pursued by hawks fell into the market-place of Cuzco and died. Great earthquakes shattered the shore, and tides did not keep their usual course. A thunderbolt fell in the Inca's own palace. Strange apparitions faltered in the air, terrible to behold. The Moon, mother of Incas, had three halos; the first blood-red, the second blackish, inclining to green, the third like mist or smoke.

Atahualpa's atrocities had come to pass. For the first time civil war had decimated the empire of the Lover of the Poor, the Deliverer of the Oppressed. Such conduct had earned its reward. Was it not to be expected that the dawn-heroes of fair complexion, absent for a season, should reappear? Their vengeance was commissioned by the Light-god.

What greater dramatic climax ever focused? What authority was ever more solidly founded? What identity of hero-gods more tangibly proven? A first appearance which further facts continued to corroborate.

II

Lured by rumors of a descendant of the Sun in a city of gold, the first lean, poor adventurer. worn with uncertainty and suffering, stepped upon the shore of Peru. Pedro de Candia was his name, who, having burned ten cities, had dedicated in expiation ten lamps to the Virgin. His "coat of mail reached to his knees, his helmet of the best and bravest sort, his sword girt by his side. He took a target of steel in his left hand, and in his right a wooden cross a yard and a half long," advancing toward the Indians. Two fierce jaguars, "beholding the cross," fawned upon him and cast themselves at his feet. Taking courage at the sight, he laid it upon their backs and dared to stroke their heads. By virtue of that symbol a miracle had happened. Pedro de Candia and the Indians were equally dumbfounded.

They followed him to the temples and palaces furnished and plated with gold and silver, all awed to silence, he at such magnificence in an undiscovered country, they at the sight of the

tall, fair man, whose long beard hung down over his iron dress; all were convinced by this first encounter, the Indians of the divinity of the Spaniards, the Spaniards of God's patronage. "Being abundantly satisfied with what he had seen, he returned with all joy imaginable to his companions, taking much larger steps back than his gravity allowed him in his march toward the people."

Eye-witnesses have described the Spaniards' first glimpse of Atahualpa, the red fringe shining on his forehead, when Hernando de Soto, the most daring of all Pizarro's followers, caracoled upon his miraculous beast into the very lap of the dignified monarch. They feasted and drank chicha from goblets of gold which young girls presented to them, sitting upon seats of gold like the emperor's own. Two historians were present "who with their quipus (knots) made certain ciphers describing . . . all the passages of that audience."

In Cajamarca, the Country of Frost, Atahualpa returned the visit. He came in full regalia, facing the pomp of a gorgeous sunset, and the Spaniards, "brandishing their pen-

nants toward the flaring west, saluted with a great shout the Setting of the Sun!"

First came multitudes of people clearing the way of stones and sweeping the road, then singers and dancers in three divisions, many richly dressed courtiers, and the guards, divided into four squadrons of eight thousand men, one before, one on each side of the Inca, and one in the rear. High on the shoulders of distinguished chiefs he rode upon a golden litter lined with brilliant feathers. His proud head, too large for his body, was encircled by the red fringe hanging above his wild and bloodshot eyes. Atahualpa, that courageous fiend who bragged that no bird flew in the air, no leaf fluttered on a tree without his permission, who though ransomed with a roomful of gold was taken prisoner in the midst of his own army by a handful of insolent adventurers, baptized in the Christian faith "Don Juan," bound to a post, and throttled like a common criminal! Pizarro put himself into mourning.

The legend which had lured the Spaniards was proven true: that the land of a powerful king lay toward the south, where immeasurable

treasure was amassed. It took a month to melt up the gold plaques and plates, brackets and moldings, statues of men, animals and plants, drinking and eating utensils, jars and jewelry of all sorts that filled Atahualpa's room of ransom.

A huge quantity of gold, carried by eleven thousand llamas and intended for the ransom, never arrived. It is said to lie buried near Jauja, and is only one of the countless masses of hidden treasure, both along the coast and in the mountains, even into Ecuador. The Spanish messengers who were carried in hammocks to inspect that caravan on its journey toward Cajamarca were almost blinded by a mountain seeming to shine from base to crest with gold. The eleven thousand llamas had laid themselves down to rest.

Ш

So they had come at last, the very image of the god himself, strange little Uiracochas in beards and ruffs; worthy of worship indeed, for they let loose thunder and lightning, the

proper arms of the Sun, from instruments held in their hands, and rode about on amazing beasts. (The Indians' fear of horses persisting to this day, they are used only as infantry.) Were the Uiracochas insensible of hunger and thirst; did they need sleep after toil and repose after labor? Were they made of flesh and bones, or had they incorruptible bodies like those of the Sun and the Moon?

So the grisly conquerors came, half heroes, half wild beasts, who did not grow exhausted by fighting, nor discouraged by wounds and the horrors of mountain-sickness.

So they came, these few poor adventurers who fell upon a roomful of gold given them by a people in ransom for the sovereign-deity whom this handful of men had imprisoned. Miracles in their favor seemed to spring up at each step; and madly stimulated, the peaks of the cordillera blazing above them, their imaginations limitless, they strode through the empire in the guise of gods and scraped the sacred gold from the City of the Sun. They ripped the plate from the walls of its temples. They destroyed the idols. It is said that the Jesuits



WOLFENBÜTTEL - SPANISH MAP, CIRCA 1529.
Courtesy of Dr. E. L. Stevenson.
One of the first maps to show Pizarro's discoveries along the Peruvian coast.



had to employ thirty persons for three days to break up a single carved stone *huaco* (idol). They dug up the treasures buried with the dead and pillaged the towns, and they brought back to greedy European sovereigns news of a land of gold. Having, as it seemed to them, found infinitely, they hoped infinitely and infinitely dared.

The glittering career of the Indies had begun. No empire was ever won in so grandiose a way; no empire ever so monstrously destroyed.

IV

Picturesque are the figures of the two great conquerors, Francisco Pizarro and Diego de Almagro, lean and tireless soldiers, "either of whom, single, could break through a body of a hundred Indians," who amassed a fortune, the greatest that had been known in many ages, wasted it in wars with each other, and died so poor that they were "buried of mere charity."

They dressed in the costume of their youth. The marquis "never wore other than a jerkin of black cloth with skirts down to his ankles,

with a short waist a little below his breast. His shoes were made of a white cordivant, his hat white, with sword and dagger after the old fashion. Sometimes upon high days, at the instance and request of his servants, he wore a cassock lined with martins' furs which had been sent him from Spain," but his coat of mail was underneath, as appropriate to his body as its steely sheath to his heart. Illiterate, greedy, fearless, and proud, wading through blood to establish the Christian faith, he was murdered at last; and as he fell, traced in his own blood a cross upon the stone floor, kissed it, and died.

Then there was the able monster, Carvajal, who went about accompanied by three or four negroes to strangle people. He jeered as they did so, "showing himself very pleasant and facetious at that unseasonable time." He left behind him a wake of spiked heads of "traitors" to the king. He wore a Moorish burnous and hens' feathers twined together in the form of a cross on his hat, bought masses with emeralds for his soul's repose, and at the age of eighty-four went to his execution in a basket, saying his prayers in Latin. "Being come to

the place of execution, the people crowded so to see him that the hangman had not room to do his duty. And thereupon he called to them and said: 'Gentlemen, pray give the officer room to do justice.'"

CHAPTER VI

PIRATES AND TREASURE FLEETS

"Gold," said Columbus, "constitutes treasure, and he who possesses it has all he needs in this world, as also the means of rescuing souls from purgatory and restoring them to the enjoyment of paradise." Raleigh remarked that: "Where there is store of gold, it is needless to remember other commodities for trade."

Gold — the evil spell overshadowing Peru, pouring out her immeasurable riches to impoverish Spain. Gold — the most incorruptible of all metals, itself the cause of most corruption!

Peru has always been cursed by wealth. The gold of the Incas was the cause of their destruction, the wealth of the Spanish conquerors, theirs; it brought about wars among themselves and ravages of foreign pirates upon the sea. When the era of precious metals seemed to wane, islands of guano were discov-

PIRATES AND TREASURE FLEETS

ered, apparently an endless source of wealth. But it was greedily exhausted by foreigners. Then came the discovery of nitrate fields, where fortunes are merely scraped off the top of the ground. But that particular territory has been annexed by a prosperous neighbor.

One wonders what undiscovered wealth may still be threatening this lavish country.

The days when fleets of treasure sailed from the distant cordilleras of the Spanish Main had begun. The tall, enchanted galleons of Lima spread sail, with their

"Escutcheoned pavisades, emblazoned poops,
Banners and painted shields and close-fights hung
With scarlet broideries. Every polished gun
Grinned through the jaws of some heraldic beast,
Gilded and carven and gleaming with all hues."

At first the argosies bore off the ransom of Atahualpa, the golden ornaments belonging to the Sun.

Albrecht Dürer, in his Tagebuch, wrote of having seen a boatload of such booty from the Indies. "And, moreover, have I seen the things which were brought from the new golden land to the king — an entire sun of gold, a full

fathom wide, likewise a silver moon of the same size, also two rooms full of armor, all manner of weapons, harness, war-trappings, and strange accourtements, curious raiment, bed-draperies and many kinds of wondrous things for divers uses, fairer to behold than marvels. They are all so precious that they are held to be worth a hundred thousand gulden.

"Nor have I in all the days of my life seen aught that did so fill me with delight. For I saw there fine-wrought things of cunning design, and marveled at the subtle skill of men in far countries. Nor know I how to tell of all the things which I saw there."

Loot of golden treasure gave way to mountains of silver, which poured forth their wealth in such profusion that it staggers even oriental imagination. Loading at Arica, ships brought silver direct from the mines of Potosí. Then there was plunder of Peruvian churches, jeweled chalices, and gold shrines. There were emeralds from the north — a land where they were sacred, small emeralds being sacrificed to larger ones.

These glittering cargoes were carried home to [78]

PIRATES AND TREASURE FLEETS

Seville, the "Queen of the Ocean." Its wonderful Casa de Contratación dealt with the wealth of the Indies and, to quote Alonzo Morgado, "the riches which flowed into its offices would have been sufficient to pave the streets of Seville with gold and silver slabs."

Like most stories of Peru, the gold and silver it exported seem mere extravanganza. Contemporary accounts, mostly in cipher, may be quoted.

In 1538, G. Loveday wrote to Lord Lisle: "Spanish ships have returned from Peru so laden that the emperor's part amounts to two million ducats. . . . The emperor has borrowed the whole from the owners." Being "occasionally pinched for money," he found it most convenient to seize the ships laden with private treasure from his "Indyac of Perrow."

In July, 1555, the Venetian ambassador in England wrote to the Doge and Senate of a fleet of caravels, "all very richly freighted according to the usual parlance of these Spaniards, who invariably reckon by millions."

Federico Badoer Venetian ambassador with the emperor, wrote (1556) that the king would

obtain so considerable a sum of money that he would be able to defend himself not only against the Pope but also against France and any other power, if necessary. By this time Peru was raining gold and silver.

Father Acosta returned to Spain with the fleet of 1587. In his boat were twelve chests of gold, each weighing a hundred pounds; eleven million pieces of silver, and two chests of emeralds, each weighing one hundred pounds. "The reason why there is so great an abundance of metals at the Indies," he wrote, "is the will of the Creator, who hath imparted His gifts as it pleased Him."

Von Tschudi says that in the first twenty-five years the Spaniards got four hundred millions of ducats of gold and silver, which was, however, only a small part of the vast amount buried or thrown into the mountain lakes whose deep waters concealed it in underground caves. "The Indians, taking a handful of grain from a whole measure, said: 'Thus much the Christians have gained and the remainder is lodged where neither we nor any one else is able to assign.'"

PIRATES AND TREASURE FLEETS

Humboldt says that from the discovery of Peru until 1800, the Old World received £516,-471,344 worth of treasure from the New World. No wonder Europe felt that gold lay about in this land of gold, and that it was only necessary to go and pick it up. No wonder Europe still has an idea of America little changed through four hundred years. And yet only one fifth of the treasure of mines and grave-mounds was supposed to be sent to Spain, whose galleons came to the far-away West Indies to receive it.

It was not long before pirates descended upon Peru. Brittany was the first to fit out fleets for the Indies "on pretense of carrying merchandise thither," in fact, to molest vessels coming from Peru.

Next, English buccaneers intercepted the Spanish vessels, slow-sailing under weight of gold.

"With the fruit of Aladdin's garden clustering thick in her hold,

With rubies a-wash in her scuppers, and her bilge a-blaze with gold,

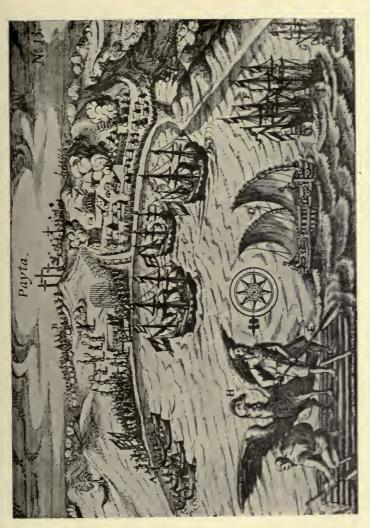
A world in arms behind her to sever her heart from home, The Golden Hynde drove onward, over the glittering foam."

Sir Francis Drake, with sixty armed ships, looted the Pacific in the *Golden Hynde*. His ballast was silver, his cargo gold and emeralds. He dined alone with music.

In 1578 he took from the Spanish galleon *Cacafuego* "twenty tons of silver bullion, thirteen chests of silver coins, a hundred-weight of gold, gold nuggets in indefinite quantity, a great store of pearls, emeralds, and diamonds, . . . and many, many other things." Only Queen Elizabeth and Drake knew the exact amount that was taken.

For three centuries pirates and freebooters harried the treasure-fleets of Spain. Toward the end of the seventeenth century, the English Calendar of State Papers compassionately remarks that foreign gluttony "keeps the poor Spaniards in arms all along the coast of Peru and puts them into strange apprehension, all mankind seeming to conspire the murdering and destroying them as common enemies, not because they do worse, but have more than ordinary."

Much of the twice-looted treasure never reached Europe, for, following the example of



A VIEW OF PAITA FROM THE MIROIR OOST & WEST INDICAL, 1621.



PIRATES AND TREASURE FLEETS

the Indians, the sea-rovers buried large amounts of gorgeous plunder in the mysterious islands of the Pacific. Even to this day, syndicates with steam-dredges and suction-pumps are following up the faded charts on which are indicated the spots where piles of doubloons and ducats and pieces-of-eight are stowed away.

CHAPTER VII

BACKGROUNDS

I

HERE lay Lima under a tropical sun, sparkling with treasure, a wilderness of rich carvings and paintings, whose piles of gold and silver shone through the thick perfume of exotic blossoms. Long caravans, loaded with the wealth of the provinces as well as the produce of sales in the remote interior, filed into Lima, where countless gold- and silver-smiths were awaiting their arrival. Weavers of silks, velvets, and brocades, embroiderers, leather and metal workers, sculptors, artists, makers of glass and porcelain bells — all the most skilled workmen flocked to the capital of New Andalusia, the continent's center, for there they found no lack of rich materials. Their fancy might fashion uncontrolled, with assurance of eager purchasers.

In Lima voyages of discovery to the Isles of Solomon were planned. From Lima pilgrimages were made in search of El Dorado, that luxurious ruler who bathed himself in sweetsmelling gums and then rolled in gold dust. There is no more romantic chapter in the history of Peru than these pilgrimages in search of El Dorado. Southey says they cost Spain more than all the treasure received from her South American possessions.

In Lima lived the viceroys who ruled all of South America from Guayaquil to Buenos Aires, "as by the divine right of kings." The viceroy was served only by titled Spaniards. He was drawn about by six horses, with sounding of trumpets, and a personal guard of two hundred Spaniards, "for the safety of his person and to support the dignity of his office." The royal seal, his insignia, rode under a royal flag upon a horse saddled with black velvet and a gold tissue foot-cloth, and was received with deep bows. The viceroy was allowed three thousand pesos to go to Callao, five miles away, and sixty thousand ducats a year for personal expenses.

Greeted with a jewel sent to meet him half-

way, the viceroy reaches the bay of Callao. Throughout Lima, the City of the Kings,—founded "with God, for God, and in His name,"—the streets are hung with rugs and tapestry and adorned with green boughs and triumphal arches. (On the arrival of the Duque de la Plata, in 1682, eighty million *piasters* were spent to pave the streets with bars of silver.)

"First comes a host of Indian warriors in feather pomp. The city militia with pikes and weapons glittering, the stocks of their guns embossed with gold, the noble guard on horseback, . . . university professors in brilliant gowns, the royal council and officials, the magistracy in crimson velvet lined with brocade of the same color . . . the chamber of accounts, the audience on horses with trappings, the scepter-carrier, heralds in armor with uncovered heads, the master of the horse with drawn sword, accompanied by four servants in livery, pages with the captain of the watch, and lastly, on a throne of red velvet whose silver staffs are carried by the members of the corporation, while the alcaldes hold the cords, all in velvet caps and gowns of incarnation color, rides

the viceroy under the royal banner and a canopy of cloth of gold. Officers of the royal household, the royal guard in full armor with spear and shield, bring up the rear on horseback."

The procession moves between companies of halberdiers in a blaze of trumpets, bells, and drums, under showers of flowers thrown from carved balconies.

"When they reach the plaza the whole company faces the cathedral and is received by the archbishop and by the superiors of the religious orders; trumpets cease, knights dismount, and the multitude sings a Te Deum.

"The procession again mounts and accompanies the viceroy to the palace gates."

"Five days of bull-fights follow, and prizes are bestowed upon those who make the most ingenious compositions in praise of the viceroy. The rector of the university prepares a poetical contest, at which the viceroy presides, seated upon the rectoral chair, which for this occasion glitters with the magnificence of an Eastern throne. The nunneries entertain him with music and present him with curiosities."

The churches of Lima were hung with velvet

and tapestry, with fringes of gold and silver and plates of gold hung in design, so that the walls were nowhere to be seen. Spanish and Flemish paintings surrounded altars of wrought silver. The sacred vessels were of gold, covered with pearls and precious stones. Santo Domingo, the oldest of the brotherhood, possessed a set of thirty candelabra of massive silver, man-high, placed in a double row along the nave of the church. The cloister contained a famous orange garden with wrought-iron waterways and life-sized paintings of Dominicus. In its center was a fountain, whose delicious drip belied its hidden presence under feathery vines. Indeed, why should the church not claim vast riches? One sixth of the population was in the monasteries, and those who were not of the number bought the dress of a religious order in which to be buried. The whole city took part in the sacred feast days, as many in the procession as looking on: legions of monks and thousands of nuns, priests, orders, religious societies, and brotherhoods with their standards, holy pictures, silver crosses, scepters, and biers.

II

But what was happening to the silent people among the mountain-tops who had stripped the Sun Temples of their offerings to enrich the adventurers from the Isles of Pearls?

Their irrigating canals had been destroyed, the roads and the whole system of government broken up, the people killed in chronic fighting or by hardship in distant campaigns. Ten thousand of the fifteen thousand in Almagro's Chilean army had died of cold in the mountains, or of heat and thirst in the desert. The people were starved, villages at a time, by the destruction of their crops. Moreover, the villages were given as fiefs to the Spaniards, who received all the tribute. Many were exhausted by dragging heavy artillery over the precipitous mountains. Garcilasso describes the immense beams that crushed the Indians staggering beneath their weight, who were relieved, only on account of necessity, at every two hundred paces. When Gonzalo Pizarro in coat of mail covered with cloth of gold made his

triumphal entry as governor into the City of the Kings, the twenty-two pieces of cannon which saluted as the procession advanced through the streets, were carried on the shoulders of six thousand Indians. All these Indians were well trained in morality and sound doctrine by the clergy of Spain.

And worst of all, deep within the mountains of Peru, hollowed by the gold and silver which they had removed to enrich a country of whose existence they would never be aware in any other way, the Indians were dying, thousands at a time. Skeletons concealed in old mines are now found, covered with fibers of silver melted by subterranean fires just beneath the cold desert. Mines now abandoned can be traced by piles of human bones.

A pair of bright green arms, petitioning, stretched forth from the body which has disappeared, were discovered in the bottom of an ancient copper mine. The copper water had filtered through and covered them with a green sheen. Every finger is tense with supplication, every fiber as in the moment of death; not an eager tendon or nerve quivering to the surface

failed of preservation. All are petrified in a bronze of nature's molding.

Stories are still told that the Spaniards drove ten thousand Indians at once to work in a Peruvian mine. When their strength was exhausted or they died from lack of food, the Spaniards drove up ten thousand more—an extravaganza of destruction matched only by the scale of nature's waste. It must be said, however, that cruelty to the Indians was due not to Spanish law, but to the abuse of it.

"In twenty-five years more than eight million Indians were worked to death in the mines of Peru."

"In a century, nine tenths of the people had been destroyed by overwork and cruelty."

No wonder Spain was able to equip an Armada!

III

Against such a dark background flamed the lurid Inquisition.

The working out of the *encomienda*, or system of slavery, and the *mita*, or forced work in the mines, was more horrible than the tortures

going on in Lima only because of the scale on which the destruction took place. In 1570 the Blessing of the Inquisition had been conferred upon Peru by Philip II. "At first heresy, then blasphemy, sorcery, polygamy, insulting servants, opposition to jurisdiction, were punished by whipping, banishment, prison, and death by fire. In all cases the goods were confiscated." The disgrace of an executed man did not end even with his death. "The sons and daughters and grandchildren of the male line lost their rights of citizenship. They might not carry gold, silver, pearls, costly stones, corals, silk, velvet, or fine cloth. They might not ride on horses, carry weapons, or use any of the things of which they were unworthy."

One star-spangled night, a man looking at the sky remarked that the multitude of stars was superfluous, thus assuming that God had erred in creation, which was heretical blasphemy. Juan de Arianza appeared in the auto of 1631 because, when reading the Scriptures, he exclaimed: "Ea! There is nothing but living and dying!" which sounded ill to those who heard it. One man bragged that he had a

horse that could go sixty leagues in one day: for that he had two hundred strokes of the lash. Another had said he knew an herb which made wives invisible before their husbands: he received five years' imprisonment. A young priest said he had seen the little Saviour in his dreams: his punishment was two hundred lashes and five years' work in the galleys. Another, who wished to found a new sect, had called the Indians the children of Israel and had declared that priests should marry, that there should be no confessional, and that the Bishop of Lima ought to be Pope. He thought the Bible ought to be translated into the language of the people and that he was holy as Gabriel and 'patient as Job. This unfortunate was burned alive; the proceedings of the suit against him filled three thousand pages.

Throughout the seventeenth century Peru was filled with mystic impostors, like the far-famed Angela Carranza, most of whom were dealt with by *autos de fe*. The use of coca was considered a part of this sorcery and was punished severely.

The confession of a real or an accused crime [93]

was drawn out by torture and compelled by a repetition of the torture. From the final judgment there was no appeal. All was enacted under seal of deepest secrecy. The torture chamber was somewhat removed, so that the screams of the victims could not be heard in the street.

Three kinds of torture were used in Lima. There was the compound pulley. A man's hands were bound to his back, and he was raised by a pulley to the ceiling by his hands; heavy iron weights were attached to his feet. Sometimes, instead of this, the victim was strapped on a table, an iron collar about his neck, and stretched in both directions without risk of choking; but every bone in his body was dislocated. The second method was smothering. The man's hands and feet were tied above a bench, and on his upper arms, thighs, and calves, lacing machines were adjusted. Then a funnel was put in his mouth and water was slowly poured in. The third method was the worst of all. The feet were made fast, the soles were covered with fat, then live coals were brought gradually nearer and nearer - a

process of roasting. When the pain was keenest, a board was shoved between coals and feet, and the sinner was asked if he would now confess his crime.

By a bull of Paul III torture could not last over an hour. After that the victim usually had convulsions or lost his mind. A doctor came, whenever such was the case, to authorize further torture.

Thumbscrews were still used in 1813.

Dr. Lea says punishments in Lima were inflicted with greater rigor than in Spain. If it were lashing, the penitents, without distinction as to sex, were marched in procession through the streets, naked from the waist up, with inscriptions denoting their offenses, while the executioner plied the lash. The mob stoned them as an act of especial piety.

The Inquisition had command of the press. The tribunal of Inquisitors, judging all, were judged by none and wielded absolute power. The Holy Tribunal did not wish to shed blood, so the accused were either strangled or burned. The death-warrant began with the words *Christi nomine invocato*, and officials of the law were

asked to treat the condemned with pity and moderation.

The auto de fe, the Act of Faith, was intended as a demonstration of authority, a representation of the day of judgment, and it was the highest exhibition of piety.

Following is a description of an auto de fe in Lima, on the sixteenth of November, 1625, quoted from Middendorf.

A procession went at daybreak on horseback through the city, with trumpets, fifes, and drums, to announce the execution. A platform was built on the plaza, forty ells high, and a stadium was erected for eight thousand people. "Between eight and nine in the morning the sinners were called for. A cross covered with black crape belonging to the cathedral was carried before them by four priests, all singing miserere in a wailing tone. Each penitent walked between two soldiers and other honorable persons. Silver boxes at the rear contained the judgments.

"The viceroy came out of his palace accompanied by a guard of honor, musketeers, and two trumpeters. Doctors, lawyers, and uni-

versity professors preceded the monks and the priests, standard bearers in coats of mail with clubs, the captain of the watch, and judges, the oldest of whom walked by the viceroy, cavalry, generals, and pages. The Inquisitors had hats on top of their caps, worn only at that time, decorated with the insignia of the Pope's legates. The militia had formed in line, and at the appearance of the black and gold banner of the Inquisition they lowered their flags in salute. An altar was raised, a chair for the viceroy and the high officials.

"The eldest one rose and addressed the viceroy. 'Your Excellency swears and promises upon his faith and word as a true Catholic Viceroy appointed by His Catholic Highness, to defend with all his might the Catholic faith, which the Holy Apostolic Church in Rome recognizes, to further its well being and growth, to follow up the heretics and dissenters and enemies, to give necessary help and aid to the Holy Tribunal of the Inquisition and its servants, so that the heretics and disturbers of our Christian religion shall be taken and punished according to the law of the Holy Church, with-

out your Excellency making any exception in favor of anybody no matter what his station in life be.'

"The viceroy replied: 'I swear it and promise by my faith and word.'

"'If your Excellency does so, as we expect from your piety and Christianity you will, the Lord God will bless all the works undertaken by your Excellency in His holy service and will give you health and long life as this kingdom and the service of His Majesty needs.'

"A mass was read for the viceroy, and a priest extolled from the chancel the glory which comes to religion through the sacrifice of heretics. After the sermon, all pledged themselves to tell any act contrary to religion which they knew of, and not to give protection to any heretic who was under the ban of the church.

"The denunciation was read as soon as the culprit was named, led up out of his secret cell and put into a cage from which he had to hear his final judgment. He was dressed in the San Benito, in itself a lasting shame. It reached to the knees of the sinner and had his portrait painted upon it surrounded by flames, devils,

and dragons. On his head he wore a bag-like, high and pointed cap, on which were devils' faces in flames. Gags were ready in case blasphemers should break out against the judges."

The burning is said to have taken place where the bull-ring now is.

IV

In 1746 the city of Lima, — the gorgeous City of the Kings, — at the climax of its luxury, was utterly destroyed. Seventy-four churches, fourteen monasteries with their paintings, lamps of gold, vessels of silver, precious stones, tapestries, and mirrors, their beautiful fountains, arches, cloisters, and stairways in rare designs, were laid waste. The building material was as rich as the work upon it; as a contemporary traveler expressed it: "If it did not exceed in beauty, it at least equaled anything in the world." In four minutes there was complete desolation. Out of the whole city only twenty buildings remained standing. Bridges broke, palaces fell, the sick in the hospitals were buried alive; nuns in their cloisters, monks in their

cells, were suffocated in clouds of sulphurous dust. Churches collapsed, crushing those who were praying within. Even the Holy Inquisition was obliged to suspend torture for the time being.

The earth was like an animal shaking the dust from its back. It swept forward in great waves; walls were reeds on its shores, bending to the tempest. Between the waves, clouds of poisonous dust rose from the chasms.

Clocks stopped. Bells in the towers clashed with limp bell ropes, till towers following in turn stifled the din under smoking débris. Everything was reversed; that which stood still was set in violent motion, and moving things were brought to rest. Shrieks for help and agonized prayers mingled, until they, too, ceased.

The sea retreated half a league from Callao, gathered strength from unknown, hidden places, and with a cosmic roar rushed over the entire city, engulfing it and carrying all the ships of the harbor across its walls and towers to be stranded in inland gardens. All of its five thousand inhabitants perished in the deluge,

and there was nothing left to give the least idea of what Callao had been.

"To be preserved from its fury could only be attributed to a particular and extraordinary help of Providence." Yet thousands in Lima who had escaped destruction or death from fright died of fevers which came after. Those who remained were occupied with burying the dead in trenches. Famine as well as fever followed, for the grain magazines of Callao had been buried under water, ovens had fallen in, aqueducts bringing water for turning the mills had been destroyed.

Nor was this all. Loath to give up its fiendish hold, not yet glutted with destruction, the underground fury visited the helpless ruins it had created with five hundred and sixty-eight earthquakes during the next year!

Processions of priests barefoot, with crowns of thorns on their heads, cords about their necks, and heavy chains on their ankles, taught the people that the destruction was of God, the roaring of the subterranean powers a warning against luxury. The prior of one society went about covered with ashes; a heavy bridle

cut his mouth, iron nails fastened his eyelids, his back was bare. "This is the punishment that God in heaven executes," said a lay brother, walking behind him, as he let fall an iron lash so heavily that the blood spurted.

The bones of Santo Toribio and Santa Rosa were carried about; the viceroy and great persons followed in mourning, with ropes about their necks. Distinguished ladies, barefoot, their hair shaved, walked in coarse clothes. The dense stillness was broken by a monk's voice: "Holy God, Holy God, be merciful to us."

CHAPTER VIII

LIMA OF TWO ASPECTS

The valley of the Rimac, where glisten the towers of Lima, is only one of the river-ways which cross the desert. The river of the ancient oracle Rimac, "he who speaks," has given its name in perverted form to Lima — the Spanish city. The temple of the speaker was in ruins long before Spanish days.

Like other streams of the west coast, the great river Rimac has run through the gamut of all zones. Hurrying down from the cordillera, it spreads fertility far and wide over the dry shore-valley. As far away as Chorillos, "little water jets," the water of the Rimac filters through, led astray for irrigation. But its own journey to the sea is vain. The mountain water is so precious to the desert that by the time the stream has reached the shore, it has not force enough left to make an outlet across the beach into the ocean.

Irrigating ditches and crumbling mud walls [103]

divide gardens and vineyards and orchards of wind-blown olive trees. Ruins of mud accumulate dust. Luxuriant nasturtiums drape every dusty bank. Vestiges of fortresses, temples, and grave-mounds of the three ancient cities of the Rimac valley still terrify owners of the sugar-fields, for the inhabitants of the sepulchers sometimes return at night to sit beneath the grape-arbors and listen to the murmur of irrigation streams which they made. Cajamarquilla, Armatambo, and Huadca were the names of these cities, and the whirlwind was their most distinguished god. His white-robed priests ate neither salt nor pepper, and tore out the hearts of men and of animals to offer them to the gods on the platforms of temples.

Sometimes, too, the Huguenot hermit who lived near the site of Huadca and who was burned by the Inquisition returns to his little caves at nightfall.

Lima is in the tropics. Its fruits and flowers are those of the tropics. Yet it is neither hot nor cold. There is no rain and not too much sun, a pleasant monotony interrupted only by earthquakes. An umbrella merchant once tried

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to set up business in Lima. His act brought forth an article in a local paper on rain, and how on one occasion when it came suddenly people had to get out of bed to find secure places. Editorials on umbrellas followed.

No, there is little to fear from changes of weather, not even thunder and lightning. There is an endless summer, with streets under a continuous awning; yet, after all, only a summer. The rainless desert is soaked in mist all winter long. It falls suddenly like a veil over the bare mountains and drenches the sunlight. A glimpse through it shows a faint sheen, sharp cliffs hazy with hues of light-green velvet, enameled on closer inspection with multitudes of differing flowers. Amancaes spring up dew-laden, those queer, greenish-yellow lilies hanging on smooth, leafless stems, giving their name to whole vallevs which they fill. One such lies beyond the gardens of the Barefoot Friars. A favorite retreat for Limaneans, it is called the National Garden. But scorpions lie under the stones.

"A suggestive kind of picture used to hang in many a mediaeval church. It was painted [105]

on both sides of a board. On one side were a pair of lovers walking hand in hand in a meadow gay with spring. Flowers blossomed about their feet; birds sang in the trees above their heads.

"On the reverse was the grim figure of Death, hour-glass and scythe in hand. The thing, pendent from a single cord, hung free in a draughty place, and the air twisted it about hither and thither, so that one side and the other was seen in swift interchange."

The Alameda, flanked with Norfolk Island pines and marble benches, had in other days rows upon rows of orange trees, stone fountains, and basins as well. At five in the afternoon gilded carriages streamed from palace gardens, driving about so that their fair occupants could greet their friends. Four thousand brocadelined, gold-trimmed carriages and innumerable chaises shimmered through the heavy odor of orange blossoms.

A traveler of the seventeenth century has described the lady of Lima, clad not in linen, but in the most expensive lace of Flanders, slipped over an underdress of cloth of gold.



GRAPES RAISED BY THE BAREFOOT FRIARS, (LOS DESCALZOS), LIMA.



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She glittered with jewels from head to foot, her shoes were fastened with diamond buckles, aigrettes of diamonds were in her hair — "a splendor still the more astonishing as it is so very common," he said. Nay, she even scattered perfume through her nosegays. On great fête days she tiptoed to church, enveloped all but one eye in a silk-lace shawl. Beneath it glinted a flower-embroidered dress of rarest stuff, fluttering a multitude of ribbons; under a petticoat of heavy brocade, miniature golden feet peeped out, or slippers of peach-colored velvet. The lady of Lima was famed for her wit, entrancing the visitor as she sipped her Paraguay tea from a silver-mounted gourd.

Little is left of former splendor. The statues, the five rows of orange trees, the sweet smells are gone. At the end of the long Alameda, bordered with wind-blown trees and wrecks of marble benches, is a fountain under palms and Norfolk Island pines. Across a shady space and above a high, yellow plaster wall, is the monastery tower, where hangs a clear-toned bell. Rugged hills rise abruptly. This is the home of the Barefoot Friars. A labyrinth of

paths leads to their orchards and gardens and cells. Going every morning in pairs to the markets to beg for food, they own nothing. They live entirely on alms.

Just before two o'clock each day, the lame, halt, and blind begin to gather from all the town wards, each carrying a receptacle. One poor woman with three or four babies seats herself upon the plaster shelf skirting the wall, setting down her pottery jar by the brook to wait.

The bell strikes two long, clear tones. The whole space is filled. The great monastery gate is flung open, and two brown-clad monks, sleeves rolled up, bring out between them a steaming copper cauldron. The famished multitude fall to their knees, many with difficulty, and a prayer is intoned.

Then the procession begins: men, women, and children in various stages of decrepitude. Beggars with old tin cans totter forward as to the Mecca of a long, hard journey. Decent-looking women, very haughty, conceal their pails under black *mantas*. Each receives two ladlefuls of meat, soup, and vegetables. The

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kettle is filled again and refilled, till all are served. After the little groups of people have finished their *cazuela*, the heavy door clashes together.

Beyond the turn of the wall, far down the avenue of palms, the Mendicant Friars emerge, four by four, and swing off across country for their daily walk.

CHAPTER IX

CONVENTS OPEN AND CLOSED

LIMA is the city of bells. Exuberant wedding carols blend their metallic jingle with three solemn peals for the dying. Hoarse, ill-cast bells mingle with bells whose tones drip like honey upon the monks beneath, who, with cowls thrown back, are pruning monastery gardens, bringing water to the fig-tree from the fountain. Bells are pitched high and bells are pitched low. Bells struck from without shake off the clear ring circling their edges. There are notes with a dry sonority like the clash of bones. Sharp bells nag the persistent sinner. Soft, sweet bells lure him to prayer. Quick strokes near at hand only half conceal those distant thuds, as if the tone had been struck from the atmosphere, giving "a solemn, religious shimmer to the day."

CONVENTS OPEN AND CLOSED

Though they are more used than those elsewhere, the bells of Lima, it is said, never grow old.

The tones are of every quality, from the tinkle of little convent bells calling the sisters to midnight prayer, to the great bell of the Jesuits, whose "clash, throb, and long swoon of sound" strikes your chest. Silver and gold in this bell cling to the clear, deep notes struck from it and pulsate more than half a minute in the tone, which carries far out over city roofs to sugar-fields and vineyards. The left tower of San Pedro was built about this bell in 1666 and it cannot be removed.

San Pedro has three portals on the façade, only allowed for a cathedral. The story goes that when it was building, permission was asked from Rome for a portal, which was given of course without delay. When the church with its three bronze-knobbed doors was finished, the Vatican was outraged.

"What," word was sent, "you ask for one door and make three?"

"For two doors one has not to have permission," came the reply, "only for three. We

would have had two, anyway; it was for the extra one we needed to ask."

The church was finished and consecrated. What could be done?

Monastery bells waken the monks at five o'clock, masses follow every half-hour throughout the morning. Burials are tolled very early by two large, discordant bells, struck simultaneously, "a roaring, sinister, mournful peal." At noon a great caroling honors the Holy One to whom the next day is dedicated. After sunset three slow peals boom from all churches. Old people stand, men take off their hats. At eight sounds the prayer to the dead, at nine, nine peals from every bell in the city are an invitation to pray for those who die to-night. This is the time when the bell in the left tower of San Pedro rings. The left tower of the cathedral is the home of many owls, which come out at night to cry above the houses where the sick are lying to warn them of approaching death.

Because innocent voices are intercessors most pleasing to God, Indian mothers in the mountains prod the poor little savage babies, flop-[112]



A FRANCISCAN FRIAR AT HOME, LIMA.



CONVENTS OPEN AND CLOSED

ping on their backs, with long, pointed, rat-tail silver spoons, so that they wail intermittently.

In Lima the voice of the bells is lifted to avert catastrophes and to beg for mercy in times of earthquake. When the bells cease, the importance of silence is assumed instantly, as with the dropping of the wind.

A little jungle of cypress, magnolia, jasmine, pomegranate, and fig clusters about a fountain which one hears rather than sees. Contralto bird-notes seem to come from far away, like "the melodious songs of birds with yellow combs in the blessed land of Aztlan."

The garden is overgrown with passion-flowers, concealing within their petals the sacred heart and nails, even the crown of thorns. Night-blooming cereus hangs darkly above the ground-glass bells of the floriponda, so ineffably sweet after sundown. Its leaves are narcotic. (In Lima one is often given a nosegay of jasmine done up in a floriponda flower.)

I sat waiting on a bench in the cloister garden. Missionary priests were showing maps to little, fluted nuns. Others in black robes and furry

hats paced up and down the cloister, fondling small missals and stopping around the corner to gaze at me through the wrought-iron grill. Mediaeval life in full swing, complete from a glance of the eye to the jaunty stick cocked under the Don Juan cloak!

One of the priests carried two phosphorescent beetles in a piece of sugar-cane.

In this convent young girls are taught that a "wife should be loving and faithful, tolerating the defects of her husband, trying to make herself esteemed by him, to soften for him the sorrows of life, cultivating abnegation, evenness of disposition, tolerance, and sweetness. She ought never to think that the faults of her husband could excuse her own."

Very different was the Dominican convent of Santa Rosa.

An illuminated manuscript hung at the portal, an absolution for those who worship here, sent by the Pope several hundred years ago. The recess in the wall was paved with cobblestones. Antique paintings of saints hung frameless above. Beside the huge doorway, heavily barred, was a turnstile in the wall, with solid

CONVENTS OPEN AND CLOSED

partitions between the shelves to prevent a glimpse within. The staring word *Paciencia* was written above it. Utter silence!

Rosa Mercédes and I tiptoed through a narrow doorway, under the word *Modestia*. We sat on a bench in front of a wooden grill with hexagonal openings. A vague, distinctive smell drifted through it. On the other end of the bench a woman was softly sobbing. We waited half an hour or more.

The week before, the birthday of Santa Rosa had been celebrated in the cloister where she lived. The week after was now being celebrated here, where she died. As I listened, there was an explosion of fire-crackers within.

Beyond a wide space on the other side of the grill was a fine wire netting, so heavy that only a shade, a brush of a veil, a suggestion of a smile could penetrate. A soft sound came through the blackness, and a voice unthinkably sweet said: "Buenos dias, Rosa mia." It was the Sister Margarita, who had been thirty years behind those bars without a glimpse of friends, buried to the evils of the world, consecrated to Santa Rosa.

The voice began to speak.

"Our glorious Rosa! Let me tell you that when she was only three years old the lid of a heavy chest fell upon her thumb. She looked up at her mother and smiled. She concealed stinging herbs in her gloves, and when visitors came, she rubbed pepper into her eyes, so that she could neither see them nor think of what they were saying. Rosa santisima!

"When she sang to her garden the canticle: 'O all ye green things of the earth, bless ye the Lord,' the trees clapped their leaves together, and even the vegetables lifted up murmurs of praise. She invented hymns to the Virgin and sang them antiphonally with a bird, though she was often surprised at being able to understand the speech of unbaptized beings. One day in the garden a black and white butterfly hovered above her. Thenceforth she understood that it was decreed that she should enter the order of Saint Dominicus. Her life from that time on was a series of acts of self-mortification. Rosa inocentisima!

"She divided her day into twelve hours of prayer, ten hours of millinery work, and two

CONVENTS OPEN AND CLOSED

hours of sleep. She was constantly aware of the presence of the angels. Rosa purisima!

"At sixteen she entered the sisterhood. She prayed to a picture of Christ until it broke into a sweat. She prepared clothing for the infant Jesus by prayer — fifty litanies, nine hundred rosaries, and five days of fasting made him a little garment; and for toys, she said: 'I give my tears, my sighs, my heart, and soul.'

"She wore a belt lined with nails, which she locked about her, and threw the key down a well. Half the nail belt is in the Santuario of Santa Rosa, where the well was. It went dry on the day of her death.

"She died here in ecstasy on this very spot at the age of thirty. Rosa gloriosisima!"

I spoke with the voice. I asked about Santa Rosa's shrine with its thousands of little silver *ex-votos* in Santo Domingo.

"Yes, that is where she lies buried, except once a year on the thirtieth of August, when she journeys to the cathedral and back.

"The daughter of a viceroy once climbed out of a palace window at night to take the veil of Santa Rosa.

"When the Pope was deliberating her canonization, he was overwhelmed by a rain of roses; when it was finally celebrated, the streets of Lima were paved with silver bars.

"In 1720, when they dug to build her convent, a strong odor of roses emanated from the ground.

"We keep her roses blooming throughout the year; they grow from the same roots as those she cared for; the rest of the time we spend in embroidery and prayer."

Such a wonderful voice!

The Sister Margarita pressed a parchment-covered book close against the netting.

"Here is a true life of Santa Rosa. It has never left this monastery. When you read it, you will understand why I have devoted my life to God through the mediation of our glorious Saint, our Patron, our Rosa de Lima. . . . She stood upon these stones in the courtyard where I now stand. Can you see why a stone has not been changed? . . . There is no word in this book which is not true. I know it by heart. I will give it to you. . . .

"Es católica?" The voice was suddenly directed toward Rosa Mercédes.



B. ROSA DE SANCTA MARIA Geestelijke Dochter van den Derden Regel van S. Doriniers, tot Lina (de principaelste stadt van West-Indien) gebooren den 20 April 1586. En aldaer gestorven den 24 Augusti, 1617. wonderbaerlijk vytsteken: de in alle deugden en mirakelen. Dit is de eerste blomme en vrucht van en Nieuw weereldt, naer het planten van H. Christen. Geloof deo Oorder der PREDIK-NKEREN vyt den Nof van den N. ROSSEN-ERINS solemalijk in den News opgelengen, bekarpteiere door den Alder Helm vader CENENS.



CONVENTS OPEN AND CLOSED

" No, protestante."

"Oh! . . . "

Her voice ran down the gamut of the scale.

"You will not then believe my book?" The voice addressed me.

I replied that I should value the book more than any one else to whom she could have given it.

"Ah," she sighed, "then that is why I wanted to give it to you."

A little pause.

"Good-by-ie," she said. A glint beyond the netting.

"Good-by-ie, mía amíga," and Rosa Mercédes and I stood alone outside.

Following is a Salutation to Santa Rosa preceding her novena, published in Lima in 1902:

"God keep thee, O admirable virgin and patron of ours, Rose of Saint Mary!

"God save thee, joy of the world, glory of the city, star of Lima, crown of the fatherland, most rich gold of Peru, treasure of the Indies!

"God save thee, flower of the church, rose of humility, white lily of purity, olive of peace,

fire of charity, most precious pearl, most beautiful dove!

- "We salute thee, O most loved spouse of the Heart of Jesus! Much cherished daughter of most Holy Mary, living image of thy mistress Catherine.
- "We praise thee, O example of penitence! Chosen from thousands, patron of a new world.
- "We bless thee, O Most Fragrant Rose, Most Precious Rose, Most Innocent Rose, Most Pure Rose, Most Illustrious Rose, Most Holy Rose, Most Glorious Rose!
- "Rosa fragrantísima, Rosa inocentísima, Rosa purísima, Rosa ilustrísima, Rosa santísima, Rosa gloriosísima!"

CHAPTER X

ANOMALIES OF LIMA

I

They sat about the dinner table — a delightful, stammering, scientific gentleman, who advised my carrying home some live camarones (crayfish); a young English curate, here to sketch all the caterpillars of all the butterflies he could find, and their cocoons; the grandson of a former president of Peru, who spoke of his grandfather's battles; and a cousin of the actual president, who told tales of ostrichhunting in the pampas of Argentina, a cosmopolitan club man, whose chief interests in Lima were cricket and polo. There was a man who was collecting everything from pearls to reduced heads and whose gold watch-fob was a Peruvian tongue-weight for the dead. A Chilean lady with the grace of an older generation spoke of the islands of Juan Fernandez and their prehistoric monuments, which have a nose and

chin, face the sun, and are too big to enter the British Museum. That led toward the archeologist.

We were eating *cuculis* — desert doves — and alligator-pear salad, while we listened to stories of pre-Inca civilizations from the man who has done most to unravel their mysteries. In Peru the alligator-pear is called *palta*, a shiny, darkgreen, leather-covered shell concealing its soft, nutty flesh. It hangs at the end of a fine twig, which is dragged down by its weight. A stiff mayonnaise so disguises the *palta* that it is almost impossible to tell where fruit ends and sauce begins.

A lady of mixed races wore twice about her neck a heavily-carved chain, on her breast the large cross at its end. She spoke of a friend who had searched for years until he should find a gift exactly suited to her; at last he beheld this chain about the neck of a pope of the Greek church. The pope parted with it reluctantly, for in a cavity in the back of the cross he kept his sacred relics.

She twirled the great cross between her fingers.

"Très chic, n'est-ce pas?" she said. "And you see," touching the clasp to loosen a little lid, "it's just the size for a powder-puff!"

A folk-lore-specialist-explorer was discussing swinging bridges in the Andes with a lady whose husband had left her in Lima while he took a distant journey in the interior to make a census of savage tribes.

"What have you been doing to-day?" she asked.

"Bless my soul, I don't remember," he replied. "Oh, yes! buying slaves in the jungle."

Two young English people at the remote end of the table had just arrived in Lima from a honeymoon adventure up the Amazon. They had sailed as far as Iquitos; then they had paddled, they had ridden mule-back, they had tramped over the mountains, and, fording streams to their waists, had lain down in their wet clothes to sleep in the cold wind. We all inquired about fever.

"Oh, yes," said the red-cheeked little lady, "my husband got the fever one day in Iquitos; it turned his eyes red and his face blue, and the whole house shook with his chills."

He seemed to like to talk about their adventures. They had been paddling all one day, he said, and were paddling still, as night settled down upon the Amazon. Suddenly there was a whirring sound like a great cataract.

"Paddle for your life," shrieked the guide, and swinging the canoe about, they fled down-stream.

The whirlpool! Its encounter the greatest calamity that can befall a traveler upon the Amazon! No craft, however strong, once caught by the outermost edge of a whirlpool, can escape. Whether it is caused by a sudden squall brushing through the forest or a piece of the bank falling in, is not known. It is certain only that a whirlpool never occurs twice in the same place.

"Death in that region," he went on, "is commoner than life. There is a horrible beast which the natives call a flying snake, with a blue head and a long prong upon it. It flies sting foremost. You are sauntering from your hammock to your cabin door. The thing flies against you, and presto! you fall with the poison of his contact, and another grave must be dug on the sposhy banks of the Amazon.

"In Iquitos a woman bears a friend a grudge. She pays the police a small sum, and the next time her friend emerges, she is bound by the guardian of the peace, beaten until she falls, and is carried home to die. Prisoners there are allowed to order their own meals," he added.

Then came stewed guavas, served with whirls of white of egg and pink and white pellets.

 Π

Nearly everybody makes collections in Lima. In the ancient house of a marquis, with its court fountain, bougainvillea, and tall Norfolk Island pine, were benches of ebony with lower rounds worn into hollows by the feet of nuns; embroidered muslin stoles; queer manuscripts; tortoise-shell combs tall enough to be filled in with flowers; silver porringers; and a point lace parasol with a carved ivory handle—all relics of vice-regal days.

One room was musty as seventeen mummies could make it. Fifteen *soles*, they told us, was the price of a mummy. There were ancient, inlaid chests filled with cases of butterflies from

beyond the mountains, huge snake-skins, overgrown orioles' nests, necklaces of mummies' teeth, and carved cases of huacos dug from Yunca grave-mounds — the pottery of mummies. Partly filled with water and rocked back and forth, the quaint things gave forth the same little half-whistle, half-sigh which notified their owners a thousand years ago that the precious water was being stolen. A soft bubbling, somewhere within the clay form, was supposed to imitate the voice of the animal painted on the outside. The liquids were meant to refresh a thirsty mummy on his death journey. He still holds his aching head. But the varnished lips were never parted, and the gurgling liquid of smoky flavor has never been sipped.

These jars were the ephemeral tablets on which a whole people chose to leave records of itself. The work of their hands can be held in ours. We can look into the staring Indian faces or upon the weird animals which pleased them, shining under a glaze which is the forgotten accomplishment of those remote tribes.

There are finely drawn portraits of the dead man's friends, whom he may have wished as fel-

low pilgrims, heads of men and women singing or smiling, some distorted with pain. The human face twisted to the same lines then as now.

Wonderful fish glide among aquatic plants, the fox enamored of the moon languishes along her thin crescent. "The sneaking cat, the sleepy pelican, the supercilious, impudent parrot," in softest yellow, white, red-brown, or black, glance all the iris shades under a purple glaze.

It was not enough to paint the manners and customs of the people, the fauna and flora of their country; they chose also to represent what they thought and believed as well as the adjustment of their sandals. We can peer into their monstrous, often loathsome, mythology and into their intangible land of fancy. Cats fight with griffins. A lizard with the face of an owl wears a jacket and bracelets. A chieftain in full regalia has a girdle ending in a fringe of almond-eyed, many-footed scorpions, each with a different number of feet. With snakes' heads as earrings, a warrior with canine teeth smaller than the snail with forked tongue beside him is fishing for an octopus with a snake-line, whose

head, as bait, has caught a man. Crab-hands grasp from ears at a fleeing figure with a snake-like body, numerous feet intermingle with a human leg, two arms with nippers, and a fantastic head with waving antennae. A cactus forms the background.

The sun looks forth from the heart of a starfish. A fanciful eye, all alone, with unknown appendages and impossible proboscis, glitters under its dark, lustrous sheen. A ghastly face with wings presides at a dance of stags. And here is a vessel completely covered by a pair of elaborated nippers! In it are placed some passion-flowers, a whirl of purple and black.

Every uncanny suggestion in an animal is worked out to complete development. We may do the Yuncas the honor to call it allegorical. It recalls the Mexican legend that "the present order of things will be swept away, perhaps by hideous beings with the faces of serpents, who walk with one foot, whose heads are in their breasts, whose huge hands serve as sunshades, and who can fold themselves in their immense ears."

It is primarily this portrait pottery which

proves the great antiquity of races in Peru. And the deeper one digs, the finer the designs.

Sitting on the ebony bench with the skin of a jaguar across its back, we ate dulces (sweets) made of eggs, and drank tea out of ancient porcelain against a background of embroidered Spanish shawls. A yellow bird, a cheireoque, who knows everything, sat upon a perch but did not sing.

III

Ricardo Palma, Peru's delightful littérateur, has collected the national library since its destruction by Chilean soldiers in the late war. Storekeepers in those days wrapped up their goods in pages of "fathers of the church." The Chileans destroyed the annals of the Inquisition. They also killed the golden oriole which had sung in the trenches early one morning before the battle had begun.

The distinguished writer of Peruvian traditions sat in his long gown, reading parchment tomes of bygone centuries, his silk cap pulled down to his eyes. I sat near him at a table

surrounded by books under a far-away skylight. There happened to be open a volume of historical sketches of Limaneans done in color by Pancho Fierro: a man dressed for the gallows riding beneath balconies of interested ladies; monks and nuns in every garb; Indian dances with whirls of color; the Lord Mayor's procession with his big mace of silver, and black servants in green velvet holding a red umbrella over his head; every known variety of eatable-seller; women with bright green trousers, whose veils covered them all but one eye, and uniforms of every profession and occupation.

About the time when the Puritans were landing in Massachusetts Bay, a law was passed prohibiting ladies of Lima from covering the face. The animals of the coachman in whose carriage rode ladies violating this law would be confiscated, and any man who spoke to such a lady must pay a hundred *pesos*. But enforcement of the law was too difficult, and the custom of the veil persisted until a few years since.

Don Ricardo turned and put into my hands a book of his own. The sun streamed through the distant skylight. I began to read: "Odo-

ray is the most beautiful blossom of the flower garden of America, a white lily scented with the breath of seraphim. Her soul is an aeolian harp which the sentiment of love causes to vibrate, and the sounds which it exhales are soft as the complaint of a lark.

"Odoray is fifteen years old, and her heart cannot leave off throbbing before the image of the beloved of her soul. Fifteen and not love — impossible! At that age love is for the soul what the ray of spring sun is to the meadows. Her lips have the red of the coral, the aroma of the violet. They are a scarlet line above the velvet of a marguerite.

"The faint tint of innocence and modesty colors her face as twilight the snow of our cordillera. The locks of hair which fall in graceful disorder over the ermine of her shoulders, imitate the gold filaments which the Father of the Incas scattered through space on a spring morning.

"Her voice is loving and feeling as the echo of the *quena* (flute). Her smile has all the charm of the wife in the Song of Solomon, all the modesty of prayer. Svelte as the sugar-cane

of our valleys, if the place where it has passed can be recognized, it is not on account of the trace which its short plant leaves in the sand, but by the perfume of angelic purity which lingers behind.

"It is an afternoon of April, 1534. Twilight sheds its undivided gleam above the plains. The sun taking off its crown of topazes is about to retire on the bed of foam to which the ocean entices it. Creation is at this instant a lyre letting fall soft sounds. The desirous breeze that passes giving a kiss to the jasmine, the petal that falls jostled by the wings of the painted humming-bird, the *turpial* that sings a song of agony in the aspen foliage, the sun that sets, firing the horizon . . . all is beautiful. The last hours of the afternoon and all things elevate the created toward the Creator.

"To hear in the distance the soft murmur of the brook slipping along, to feel that our temples are brushed by the zephyr filled with the perfume which is exhaled by the flower of the lemon-tree and the rushy ground, and in the midst of this concert of nature"... such is the imagery of the literature of Peru.



A GLIMPSE OF OLD - FASHIONED LIMA.



IV

A woman in lilac called Dolores, a pretty woman with a vapid face, was absent-mindedly turning a green glass globe between her fingers and selling guavas. Young soldiers whose swords trailed along the pavement were eating the guavas.

We got out of the carriage and rattled at a door until a keeper with jangling keys came to open it. The walls were spiked and covered with broken glass. The door banged together behind us.

A thin, delicately featured man in a black silk cap and stock came forward in welcome. "The composer of Ollanta, the national opera," some one introduced. He led us toward a bare room scattered with manuscript music as fine as copper-plate. I looked at the iron bars across the windows. Over the piano hung three dusty laurel wreaths, the people's tribute to a genius they could not understand. After a three weeks' presentation by an uncomprehending Italian troupe, Lima demanded Mignon, and the manuscript opera was returned to

the upper, right-hand drawer from which its composer now drew it.

"I am transcribing the melodies of the Indians of the highlands, some of them survivals of Inca days," he explained.

He played the weird, syncopated music of the Andes, bringing the indefinable "shiver of unknown rhythm," the wheedling love-songs and the sad *yaravis* which suggested those deep valleys lost among the mountain-tops.

"You know the yaravi of the Indians? It is a peculiar music, a melancholy idyl reflecting the somber Indian character—a music of extremes, for no other is so dismal and so sweet. It wails in a minor key through strange Quichua words, the language of the Indians.

"Many of these melodies I have used unchanged. Nothing so speaks to the spirit as they. . . . A secret music like that of falling water — one cannot hear it without thinking of the riddle of the world. It has a full, pent-up significance, as when a bird puts all the fervor of its song into pianissimo. It moves like the music of birds, and like it does not admit of criticism."

I asked if the Indians sang unaccompanied.

"There is sometimes a reed-flute accompaniment," he said, "as simple as the song. The flute is called a *quena*. Then, too, they play upon a pipe-of-Pan, supposed to have persisted since Inca days. But melody suggests to them things far lovelier than they can conceive by words. What they wish to say is made intelligible by the sadness or cheerfulness of the tune."

There is a legend that a priest in early Spanish days loved a beautiful Indian girl who died. In desolation he mourned for years, until he dug up her skeleton and made a flute out of the big leg-bone. Then upon it he played weird, sad tunes and was comforted. This is the origin of the human-bone flute so widely used.

"Have you ever heard of the 'Jug of Mourning?'" he suddenly asked. "Sometimes at evening the Indians play on flutes inserted in a large earthenware jar to make their tragic tones more resonant, and, sitting grouped around it at a little distance, they cry aloud and shed tears for the downfall of the race. The Indians' misfortune is infinite indeed, but a misfortune

terribly uniform; and so is their music. Yes, even their suffering is consistently monotonous."

I asked about the libretto of Ollanta.

- "It is the only one of the great dramas dealing with exploits of kings, acted before the Inca by young nobles, still told by the people. Ollanta was a provincial governor who dared to love a daughter of the Sun and was commanded not to raise his eyes."
- "Have you had anything published?" I ventured.
- "This," he said, handing me an *Elégie* bearing a Paris publisher's mark.
 - "Could I find it?"
- "Oh, no. It was out of print long ago. . . . Now I am working at *Atahualpa*, an opera. I consider it by far my greatest work; let me show you," and he took some loose leaves from a portfolio.

He began to play again. His whole body swayed to the spectacular rhythm. There are occasions when rhythm is music, when melody is a refinement hardly necessary. Everything in nature keeps time to such a rhythm. Noth-

ing can be indifferent. It turns a whole landscape theatrical. We were whirled up into the midst of the frenzied feather-dance, and beyond into a lofty sky where condors scarce can breathe. In the distance glittered the ice-cold puna cities. There is nothing I could not do if that thrilling moment could have been indefinitely prolonged!

"But you are interested in seeing the boys at work, I feel sure," he broke in.

The composer of *Ollanta* — sub-manager of a school of correction!

"The boys are either bad or abandoned by their families at an early age. They are brought here and taught trades. They do all the work of the school.

"Here is their swimming pool and their dormitory. In their schoolroom you will see object-lessons upon the walls, pictures of what will befall them if they are bad.

"The worst thing they can do is to run away. They are put into prison when they return—here," and he unlocked a big door. There were four little doors on each side of a dark room. Those on the right opened into closets two feet

wide and six long, with bars overhead, all painted black, "to keep them from writing on the walls," he explained. When the padlock was removed, the cubby-holes on the left were opened; two feet square, black.

- "Here they must stand."
- I gasped.
- " Oh, yes."
- "How long do you keep them in such a place? Surely not over night?"
 - "Not more than eight days."
 - "And in the other side?"
 - "Not over ninety days in there."
 - "Is any one in here now?"
 - "Yes, two," he said.

v

Certainly nowhere in Peru are contrasts more marked than in Lima of to-day, with its splendidly carved balconies of former times, its scavenger birds, and mud roofs strewn with ashes; its dim, candle-lit, incense-filled churches with their leper windows, and its international horseracing; its collections of ancient, battered, gold

idols, silver llamas, dishes and spoons, and its aeroplane called *The Incal*

Lima is a city where bull-fights are not only an amusement of the people, but of the finest and best intellects which the country has produced as well. Bull-fighters with queues, gold and silver embroidery, lace fronts, and red silk stockings are seen in the streets. Formerly the archbishop, religious orders, and monks all came to the bull-fights. The viceroy, shouting "Long live the King," threw a golden key into the bull cage, and the fight under most august patronage began.

The market of Lima is a picturesque place: Chilean peppers (aji), orange and red, pats of goat's-milk cheese in palm leaves, unsalted butter in green corn husks, piles of ripe olives of various maroon hues, strawberries in handwoven baskets. Fighting cocks glisten in the intense sunlight. Ladies in mantillas float by, closely followed by boy servants, their arms full of bundles. Here and there Franciscans with "sandaled feet and clattering crucifixes" are amassing tribute. There are said to be about six thousand ecclesiastics now in the city.

Lima — with its botanical gardens, condors and llamas in cages, long allées of royal palms, and its cement tennis courts where English people are drinking tea; its venerable university, the oldest in America, and its aimless daily driving around and around the Paséo Colón; its proverbial milk-women in hand-woven shawls among shining cans perched high on ponies, and its craze for art-nouveau; its treasuring of Pizarro's bony remnant (which a guide explains is "completamente momificato") and its earthquake-rooms of solid masonry! Lima — where one discusses at some time or another everything from men-of-war to tapir-skin muffs! Lima — with its mediaeval festivals, when priests' chanting fills the streets, incense rises, blossoms fall, and candles twinkle in a ray of sunlight! As the old saying goes: "It were possible to die of hunger in Lima, but not to leave it."

PART II

IN THE MOUNTAINS

"And daily how through hardy enterprise Many great regions are discovered, Which to late age were never mentioned, Who ever heard of th' Indian Peru? Or who in venturous vessels measured The Amazon huge river, now found true?

Why then should witless man so much misween
That nothing is, but that which he hath seen?"

Spenser



CHAPTER I

THE HIGH REGIONS

i

No Peruvian thinks of zones differing from his own as being remote geographical localities. Peru contains them all. He does not have to travel over the face of the earth for a change of climate, but makes short, domestic, vertical journeys instead. Living under his banana groves among his sugar-fields in the lush coast valley, if he feels need of fresher air, he takes a trip up to the temperate zone, where apple orchards and wheat-fields lie spread out in a recess of the mountains, and strawberries redden to perfection. Has he curiosity to see an arctic storm, he goes a little higher, coming out upon the bitter table-land where crests of glaciers cut the sky.

The Andes, youngest of mountains — what [143]

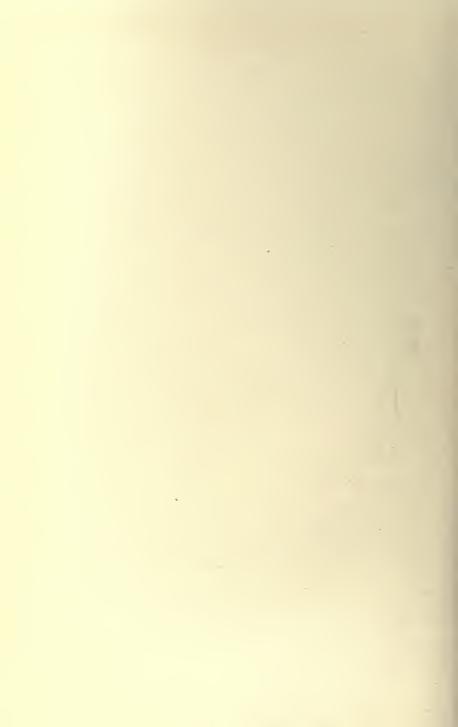
a weirdly tossed world! All the most obscure and harsh substances of the planet have been heaped up here. The rough places of earth have turned over and reached up where they brush against the firmament.

Volcanic power has its domain in these high regions of earth, where nature is in anarchy, possessed of unnatural powers. It is a great, uneasy wilderness, where torrents rattle through daring gorges, only to fall a thousand feet, scattering into a dust of foam. Icicles hang from every joint between the stones.

It is a colossal, brutal land, fresh from the cataclysm, whose ponderous masses of rock are all sterile from cold, all silent under perpetual snow. In its clearness of atmosphere sparkles a new conception of the night-time sky. It is a land where thin layers of lichens are the only trace of plant life, where condors wheel about the highest pinnacles, and silver lies buried deep in the ground. It is the lair of mercurymines which paralyze those working in them, where hot and cold fountains mingle to make one river, where springs of tar and rivers of peat ooze from suffocation within.



A TRESTLE OF THE HIGHEST RAILWAY IN THE WORLD, ACROSS THE INFIGRALIO.



Hot from their passage through the glowing veins of the mountains, springs bubble into life, sour, turbid, saturated with gases, possessed of weird powers, capable of giving life as well as of taking it away. Their waters turn to stone as they spread over the plain. In this frozen waste of glaciers, sheltering fire and magnetic iron within, all forces and elements are seething, though shrouded with snow. As the noise of water fills the desert, so the roar of fire can be heard among the frozen mountain-tops.

Long, long ago, a volcano was puffing out asphyxiating fumes. It melted the metal on the edge of its crater, and turned rocks burst from its own black mouth-pit to red and yellow and green. Fire boiled over the edge and advanced in a tide of flame down the mountain-side and into the valleys. The favorites of the Sun who lived beside it complained to him of the ruin caused by the volcano. Somewhat irritated himself, he "smothered the genius of devastation in his lair," covering the top of the mountain with an impenetrable cap of snow, leaving little, seraphic blue lakes here and there upon it as a hostage. This frozen giant,

whose entrails the fire is devouring, still lies sleeping with his granite dreams.

When all the beneficent qualities inherent in a world have been wrested from it, and life has disappeared toward experiences elsewhere, or when a comet's tail has swished life suddenly away, a wilderness like that of the high Andes would result—a place where chaos and disorder is the only rule. Yet the law of chaos we must believe is no law at all.

Stretched among these mountains is the vast table-land called *puna*, on which flourished the Indian civilizations so famous in history. Abundant rain falls, but cold prevents it from covering the ground with flowers. Reveling in the high pressure of the mountain-tops, humming-birds flit about in the snow. The finest morning begets the heaviest afternoon clouds, and warm atmospheric currents, quite definitely confined in the cold air, travel through the desolation.

The wind, seeming to tear up the ground and pulverize the summits, is unable to dissipate a mist which magnifies the rocks and presents the traveler's giant shadow with a whole system of concentric rainbow halos — his apotheosis in

the clouds. The wind brings with it cold clouds of dust laid only by a fresh fall of snow. It mummifies the beasts of burden which fall by the way. Mirages, too, the escort of tropical heat, shimmer upon these arctic plains.

With all the paraphernalia of the torrid zone, limitless vagaries of torrid force which knows no law of custom, the *puna* has no enjoyment of it. For the cold seems also to have taken on the exuberance of tropical nature.

You may lose your way in a snow-storm; or in the hot and stifling valleys, where the tropical sun can concentrate, you may die of the bite of a venomous serpent. Parched by feverthirst, you may not drink the water, for it brings varieties of diseases, bounded by their valleys' walls.

Your mule may sink into a morass or break his leg in a viscacha burrow. He may eat a poisonous mala yerba or garbanzillos. Broadly laden, he may be scraped off a bridle-path clinging to the sheer precipice. He may be carried away by the swift current of a glacier stream in attempting to ford it. He may col-

lapse from lack of air and leave you stranded in a lifeless desert. Soroche-sick and burned to a crisp by the relentless cold, you urge on the staggering mule as he stops constantly to gulp the thin air. He cannot be satisfied, although he has a second set of nostrils cut through to ease his breathing and avert soroche.

Still the glaciers crawl down from brooding peaks above. The sun, magician of the bleak mountain regions, comes out and glints green on broken strata of the red mountains. It discovers all the bright colors in the hills of porphyry and clothes them with fresh shadows. It runs along a vein of shining mica to accuse it. It plunges into the middle of a lake of polished jet settled in the snow, "making a great, golden hole."

A single hill in sunlight glows with streaks of iris-color, matching the rainbow forms as they appear above and fade again. Little cloud islets surround far-off peaks, sunk beneath the horizon. Pyramids of ice twinkle, and fantastic stone needles stand in rows too precipitous for snow to cling to their bare sides. They are called early inhabitants, which Pachacamac in

his anger turned to stone. The air, though thin almost to disappearance, cuts like a razoredge.

With eyelashes frozen together, you can yet be sunstruck. Teeth to teeth, cold and heat meet upon "the waste, chaotic battlefield of Frost and Fire." Cold is besieged in vain by the sun at its hottest. This land of silent chaos takes on the cold of outer space so near by, which, shot through by the fierce heat of the sun, is incapable of absorbing any warmth.

The magical sun, dispelling somewhat the mountain-sickness, only brings with it another, even worse. For blazing across the snow-fields in its tropical fury, *surumpe* follows, snow-blindness, cured only by fresh vicuña flesh laid upon the eyes, so the Indians say.

The over-arching vault is indigo. Desolation is brightened by a radiant light, infinitely attenuated, "diaphanous as the starry void." It caresses the bristling scenery. It penetrates caverns and fills them with a gold and purple mist. In the world of light and shade which it creates, even the shade gives light. Upon

water, the light, startled by its own reflection, sparkles and dances and leaps.

Words give no idea of the brilliancy of the snow on the crests of the Andes, because there are no words made of sunlight and crystals: luminous, empyreal snowshine, shattered by the sun now and then into rainbow colors. As silence is perfect only because it has the possibility of being broken at any instant by a gigantic crash, so whiteness is the emblem of perfect purity only because the possibility of all color lies within.

He who has not galloped across an Andean puna chased by a tempest, has not known the full, wild force of the elements. Lost in a whirl of lightning, wind, and snow, his mule, maddened by electricity snapping off the ends of his ears, dashes from the thunder chasing at arms' length. Red lightning zigzags between the summits. Blood-red cataracts tumble over the volcanic crags. Huge pieces of rock break loose and crash from the cliffs. Deep furrows are ripped up, following the lightning as it runs along close to the ground.

Lack of air and bitter cold are forgotten.
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Each flash acts like a fresh whip-sting to the mule. The compass snaps against its box. Magnetic sand leaps into the air and flies about in sheets. The rocks seem ablaze, the whole sky is on fire. The atmosphere quivers with uninterrupted peals, smothered in the gorges of granite, buffeted by the mountainsides, torn apart by the high peaks, till, finally overtaking each other, they are confounded in a mighty burst of thunder that breaks loose in the sky, and in a cosmic roar reverberates against the nothingness of outer space.

Then the sun slowly settles in calm. The striped walls flare in the sunset light, flamboyant as the bang of brass mortars in pagan idolatry. The mountains shine from base to summit, while "the night, grazing the soil and step by step raising its wide flight, —the dying light, fleeing from crest to crest, makes the most sublime summit resplendent, until the shadow covers all with its wing."

All vague sounds subside into an "excess of silence."

The last incandescent peak shines, and goes out.

II

How appropriate it is that quicksilver, a liquid heaviest of metals, should come from this land of contrast. The most elusive product of a mysterious country, imperceptibly by fumes it enters the nostrils of those who seek it, either destroying their teeth or disintegrating their limbs; a metal which, becoming mere vapor, is again transformed by a sudden chill to metal; though it rises as steam, it falls as quicksilver. Pliny calls it the poison of all things, the "eternal sweat," since nothing can consume it. To the Incas it remained a mystery, for although its "quick and lively motions" were admired, its search, being harmful to the seeker, was forbidden. They did, however, use the vermilion found with it: handsome women streaked their temples with vermilion.

Silver also is born in certain cold and solitary deserts of the mountain-tops, melted by subterranean fires within its deep veins. Silver being the only produce of the soil, the necessities of life have to be brought from afar. It

seems as if the vigor that vegetation would absorb goes into the silver.

The mountain-tops are full of legends of mine discoveries usually intertwined with romance. Greedy lovers have sacrificed their love for a mine, and many are the mines filled with revengeful floods. Huira Capcha, a shepherd who had been guarding his flocks near Cerro de Pasco, awoke one day to find the stone beneath the ashes of his fire turned to silver.

It is told in connection with the mine of Huancayo that an Indian friend gave a Franciscan monk a bag of silver ore. The eager friar wished to know where more could be found. The Indian consented to show him, but blindfolded the friar, who took the precaution to drop a bead of his rosary here and there as he went along. When at last the monk stood marveling at the bright masses of silver, his Indian friend gave him a handful of unstrung beads. "Father," he said, "you dropped your rosary on the way!"

In 1545, an Indian called Hualpa was pursuing a vicuña up the mountainside. He grasped at the bushes as he scrambled up a

steep cliff. One came up by the roots, which were hung with globules of silver. That particular vicuña hunt took place on a mountain called Potosí. The discoverer of the mine of Potosí was murdered by a Spaniard named Villarroel, who became its proprietor. murder was an unnecessary precaution, however, since a mysterious voice had commanded the Indians to take no silver from this hill, which was destined for other owners. From that romantic mountain has flowed far "more silver than from all the mines of Mexico." "Prior to 1593 the royal fifth had been paid on three hundred and ninety-six millions of silver." The only difficulty the Spaniards encountered was in finding water enough to wash the silver. The hills about Potosí gleamed with as many as six thousand little fires, smelting furnaces belching horrid odors, scattering liquid silver pellets. They had to be carried where the wind blew, sometimes higher up and sometimes lower down.

So this splendid Imperial City grew up in the subtle air, varied by icy winds and storm. The extraction of its prodigious wealth was a

means of torture to those who worked in continual darkness without knowledge of day or night.

Yet, even among the tops of the Andes, living things are adjusted to their environment, queer little animals of the heights giving the only human atmosphere there is. Leaping viscachas, with cat-like tails, carve through the frozen ground village burrows made to last forever, treacherous pitfalls for a traveler's mule. With the finest, silkiest fur, valued by even the Incas, chinchillas sit in the shadows, never in the sun. They appear suddenly on the steep cliffs at dusk and nibble stiff grasses; then disappear like magic, leaving little chains of footprints in the snow. A small toad inhabits the boundaries of perpetual snow, and a nice little plant called maca has its best flavor only above an altitude of thirteen thousand feet, where all flavoring ingredients have long been left behind.

The wild gazelle of the Andes, with fur the color of dried roses, the graceful vicuña, creature of quickness and flight, lives upon the coldest heaths and in the most secluded fastnesses of the mighty Andes and seldom de-

scends below the limit of perpetual snow. His back, burned tawny by the tropical sun, is covered with snow.

Far in the distance a flock is grazing. The single male stands near by upon a rock. A foreign sight or sound, a quick movement of his foot, a short, shrill whistle vibrating through the clear, puna air, a flash of golden brown, and the whole flock is lost in the wilderness of rocks, fleeing miles without stopping. It is said that if the male is wounded, the females surround him, allowing themselves to be shot down rather than leave.

The vicuña defies pursuit or capture and disappears at the first glimpse of intruders, driving the young before him. He is no less wild than in the days when he was royal purveyor of softest fabric to the Incas' wardrobes. His habits are as elusive now as then, when Indians thirty thousand strong entrapped the wild animals among the mountain-tops. These solemn huntings took place every fourth year. Meanwhile the wise men kept account of the flocks with colored threads, so-called quipus, their method of enumeration.



ALPACAS ON THE ANDEAN PUNA.



Cousins of the vicuña are the awkward huanacus, which drink brackish water as gladly as fresh and seek a favorite valley where they may breathe their last and pile up their accumulated bones — as sea-lions go to particular islands to die, the wounded being helped thither by companions. The Incas worshipped the llama, alpaca, and these wild relatives of theirs; they carved their grotesque forms in stone and fashioned their likeness in gold and silver for household gods.

Far above the limit of human life, even beyond the haunts of vicuñas, there is still one living creature. His shadow sweeps over the wilderness as he passes between it and the sun—a shadow the only appearance of life. It is the condor, who lays her white eggs on the bare rock of the loftiest mountain peaks and knows where the heart of each animal lies.

The mighty condor, who can kill an ox with his beak of steel, who can swallow a sheep or exist a month without food.

The majestic condor, who swims in the highest air or sweeps down upon his prey with a deafening whir of wings.

The condor, a symbol of light, who circles up to the ether of outer space on an almost imperceptible, tremulous motion, or proceeds undisturbed, without effort or flutter of wings, in the icy teeth of a tempest, a symbol of storm.

He watches the sun rise over a continentjungle, glimmering with heat and dampness, and long after the sunset glow has faded from the highest snowy peak, he sees its fiery ball drop beyond the farthest edge of the Pacific.

The fabulous condor, known in Europe when Peru was a myth, a hostage from a fairyland of gold and silver; a griffin which revels in solitude and in evidences of things gone by.

Loneliness is the condor's only friend.

The wind howls through his broadened wings.

CHAPTER II

A MEGALITHIC CITY AND A SACRED LAKE

I

THERE is something more mysterious than the sea, and that is the desert; something more mysterious than the desert, and that is the mountains; something more mysterious than the mountains, and that is the jungle. Yet there is something with a deeper mystery than all—the tradition of a great race that has struggled to a climax and subsided.

Where is there a more unbridled ocean? Where a more pitiless desert? Where other Andes? Where so limitless a jungle? And where, in the history of the whole world, so picturesque a dynasty — whose god was the Sun, whose insignia the rainbow, who dwelt in houses lined with gold, who tamed the earth's resources so that their aqueducts in a rainless

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land are still ministering to the descendants of a people who destroyed them, and who left not one written word to testify that they had ever been created at all.

What can be said of the Incas, the theme of romance ever since the greed of the Spaniard reduced them to a legend—romances pale indeed beside facts recorded by sober historians? A people who used copper for iron, quipus for writing, llamas for horses; who sacrificed condors and humming-birds to their gods on the frozen plains; whose accumulations of precious metals exceeded stories of Ophir's wealth; whose ears were enlarged that they might better hear the complaints of the oppressed, and who were brought to destruction by a handful of adventurers whom the whole training of the people had led them to worship as gods.

Yet the Incas were only the final stage in a series of races that flourished on the heights of Peru back through the ages. They were but the last flicker of a guttering civilization without a name, which has left only a few silent ruins built by unknown peoples, of whom these

"symptoms of architecture" reveal to us the forgotten existence. The mystery that fires our imagination in contemplating the Incas had shrouded their predecessors from them with an impenetrable veil.

Humboldt once remarked that the problem of the first population of America is no more the province of history than questions on the origin of plants and animals are part of natural science. In considering this megalithic age, we have to do with pure speculation, not with any legitimate domain of knowledge. Learned treatises end only with a question. Dr. Bingham has recently discovered among these mountains glacial human bones, possibly twenty thousand to forty thousand years old. They may shed new light upon the identity of the makers of those mysterious terraces which appear coeval with the creation of the world.

Vestiges of past civilizations are everywhere about, "monuments which themselves memorials need;" terraces hollowed out of the mountains to the very summits, bits of stone walls, roads, aqueducts, or an occasional stone idol with a shallow vessel for the blood of victims,

perhaps a staring face on a pillar with projecting tusks and snakes intertwined on its cheeks.

Tiahuanacu was made by a race which as far antedates the Incas as they the dominant race to come. Everything to do with it is remote and forgotten. Of necessity even its name is modern, having been given by the Inca Yupanqui to his "resting-place." The great pillars of the City of the Phoenix rise from the roof of the world, "as strong and as freshly new as the day when they were raised upon these frozen heights by means which are a mystery." Single stones measure thirty feet in length. Heads of huge statues lie about and hard black stones difficult to hew, the corners as sharp as when chiseled before the memory of man. Niches and doorways are cut from the middle of single blocks, whose corners are perfect right angles.

Many finely sculptured stones are now used for grinding chocolate, some of the larger ones for making railroads. Prehistoric idols lean as doorkeepers against flimsy, modern walls in the almost deserted modern town, and one weird

face has found its way as far as the Alameda in La Paz. Beyond the protecting opening of a still perfect monolith lies the burial-place for still-born Christian children.

A monolithic doorway, beautifully sculptured, lies broken in two by lightning. A squareheaded, legless, impenetrable god, speaking from right-angled lips, still stares from behind his square eyelids. Weeping three square tears from each eye, he surveys the waste and desolation about him, just as he looked unmoved upon the golden pageants of Inca days that did him honor as a superhuman deity who had sprung into being in one night with a whole city about him. His hands wield snaky-necked scepters, each the head of a condor, the lightning bird; and rows of square little worshippers in wings and condor-fringes kneel beneath crowns of rays fading off into the heads of birds with reversed combs.

No one yet knows the meaning of the sculptured deity which confused Inca amautas (wise men) a thousand years ago. Though the Creator is supposed to have lived in Tiahuanacu, an eminent German, Rudolph Falb, says the

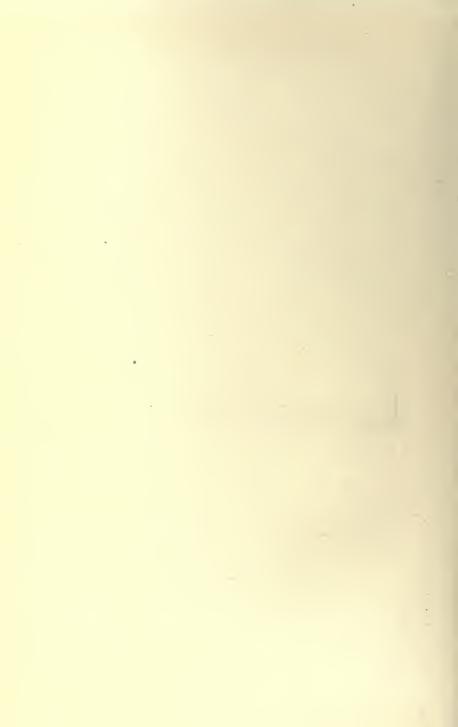
weeping god is a hero of the flood, his tears the symbol of the deluge.

A tradition of the sixteenth century ascribes these monuments to an age before the appearance of the sun in the heavens. Their builders were destroyed by a flood sent by the wrathful god, Con Tici Uiracocha, who came from the south, converting "heights into plains and plains into tall heights, causing springs to flow out of bare rocks." Half in regret that he had destroyed his race of men, he created sun and moon to render visible the waste he had made.

This information is as accurate and authentic as any which a long line of distinguished explorers and archeologists have been able to substitute for it. Men of sane judgment agree in admitting that there is nothing to justify any conclusion. But they also agree that the significance of Tiahuanacu exceeds everything hitherto discovered in Peru. It recalls Carnac and Philae. It stands with the dolmens of Brittany, Stonehenge, and the cyclopean terraces of the South Sea Islands, as a great riddle of human history.



A GOD OF TIAHUANACU.



II

Dropped in the bottom of yawning red gulfs, with snow-peaks glistening overhead, are wild valleys of differing climates, the mighty quebradas of the Andes. These canyons, which the famous hanging bridges used to span, intersect the wilderness. They lie in dusk while the overarching cliffs are bathed in full sunlight, for sunrise and sunset are within a few hours of each other. The warm air, steaming upward, pushes the snow boundary far above. Strata of black sand on the valley's walls have been tunneled by cave-dwellers of ancient times. French sisters of charity move about in cloisters under eucalyptus trees.

Such a surprise is Yucay, tucked in snugly between two mountains, wrapped in soft air and scents of unknown flowers, the loveliest spot in all the empire of the Incas. Streams of clear water descend to it from above and form the smooth, deep river of Yucay. The Incas sought it out for their gardens of pleasure and were lulled to rest by bells of gold tied to the hammocks in which they slept.

Water has a very tranquillizing effect. It sweeps along a valley, and the jagged remnants of volcanic action are smoothed out into long undulating lines.

Water collects in all crevices; lakes green as iron vitriol, fed by subterranean springs, lie in the surly country like jewels in their setting. When night shadows have settled in the valleys, the alpine glow is reflected in the quiet surface.

There are no fish in the lake of Chinchay-cocha, Laguna de Reyes. Though their element is water and they die in air, here they die in pure water for lack of air. The *ingahuallpa* sings a monotonous note from the bank at the close of every hour during the night. The outlet of the lake is narrow and deep, and its clear water flows smoothly and without noise.

All the lakes have their secrets. The little lake of Orcos still holds the golden chain with links wrist-thick made by Huayna Ccapac at the birth of his eldest son. It encompassed the market-place of Cuzco. It was so weighty that "two hundred Indians having seized the links of it to the rings in their ears were scarce able

to raise it from the ground." After the coming of the Spaniards, it was thrown for safe-keeping into this round, deep pool filled by unknown springs. Safe indeed it is. Orcos has not given up its charge, though repeated attempts have been made to reach the bottom. Trying to drain it by a sluice and trench, the Spaniards "unhappily crossed upon a vein of hard rock, at which, pecking a long time, they found that they struck more fire out of it than they drew water"—the opposite element from the one they expected.

Up against the sky lies a sea where men sail in boats of grass — Lake Titicaca, where ships are silently struck by lightning without crash of thunder. On these high seas the navigator has to go by instinct, because of the loadstone round about — magnetic iron, it is now less picturesquely called. Saint Elmo's fire blazes from ships' masts on stormy nights. Sometimes a pointed tongue of black clouds swings from above, "like the trunk of some gigantic elephant searching the ground." A similar one raises itself from the surface of the water, slapping back and forth, seeking the point of the

tongue above, and when they have found each other, they join in a mighty, black column, out of which burst thunder and lightning. It whirls off everything within reach and sucks down a passing *balsa* (boat of reeds) into a depth never sounded.

The water of Lake Titicaca is ice-cold and brackish. Its strangely fashioned fishes never come to the surface. It is inhabited by great animals like sea-cows, occasionally seen resting on a beach of some remote inlet. The grottoes along the shore are guarded by gray and black night herons and inhabited by the sea-cow or other monsters!

Queer birds haunt the wide stretches of totora growing along the shore, reeds whose stems are used for making boats, and whose tips are used as salad. Here live the stately puna geese, dazzling white, with green wings shading into violet; black water-hens, white quinlla, dark green yanahuico with long, thin, bent bills, finely etched ducks, ibises, licli, metallically bright, and sea-gulls from the Atlantic.

Coal is found on the shores of Titicaca, which suggests a mystery. At what elevation could [168]

tropical coal plants grow? The bones of mastodons are also here. But rocks even higher up are smoothed as if by waves, and beaches are found like those of the actual sea. Both Humboldt and Darwin found shells, once crawling on the bottom of the sea, now embedded fourteen thousand feet above its level.

Small lakes are sources of small rivers, by which they are emptied. But great Titicaca forms no stream at all. Its outlet has no outlet of its own. The rush of nauseous water is poured into a shallow lake-twin not far away — Poopo, through whose mysterious whirlpools the water drops back again in subterranean escapes. This tumultuous torrent, the Deságuadero, was spanned in former days by a bridge of reeds.

Recent measurements show that the level of these two lakes is constantly lowering, and eventually they will disappear. They were once the source of the greatest river in the world, but some day there will be only a salty deposit in the hollows they now fill.

Titi, the cat, kaka, the rock, Lake Titicaca was named for a little island within it, around

which cluster legends of the origins of things. It was the most revered shrine in the empire of the Incas. Neither the wide fields of Chita, where the flocks of the Sun gamboled, nor the valley of Yucay could equal this enchanted isle of Titicaca.

Before the arrival of man, the island was inhabited by a tiger, carrying on its head a magnificent ruby, whose light illuminated the whole lake as the afterglow the snow-covered peaks above. The Hawaiians have an expression for the shifting of colors in a rainbow. The Indians on Lake Titicaca have special words for the glow of fading sunlight on the mountain summits and the purple of the glaciers in their hollows.

The Sun had preserved himself from the flood by hiding in the depths of Lake Titicaca. This was his island, out of whose sacred rock, after the deluge, he soared like a big flame into the sky. His footsteps are still to be seen perpetuated in iron ore. The original Incas were let down by the Sun, their father, on to the small island and commanded to go forth to teach the savage inhabitants.

But the worship given this spot by the Incas was only absorbed in that of former times. This "Island of the Wild Cat" is a field of aboriginal myth and tradition.

The sacred cliff where the Sun had risen was covered by the Incas with sheets of gold and silver, "so that, in rising, he might see the whole rock ablaze, a signal to worship." "Sixteen hundred attendants manufactured chicha to throw at it, and pilgrims from the entire empire brought offerings of silver and gold." Garcilasso says that "after all the vessels and ornaments of the temple were supplied, there was enough gold and silver left to raise and complete another temple without other material whatsoever." All the treasure was thrown into Lake Titicaca to save it from the Spaniards. Ten of them were drowned in 1541, while hunting for it. Titicaca guards its secrets well.

The approach to the temple was a very complicated structure known as "the place where people lose themselves." The pilgrims, after much fasting on the sacred ground of the island, were allowed to pass barefoot through the first gate above, the "door of the puma," puma-

puncu. After more fasting, they might go down through the second gate, the "door of the humming-bird," kenti-puncu, so called from feathers of humming-birds plastered over its inner side. They were especially honored by the Incas, colored like the rainbow emblem. After more ceremonies, the pilgrims were allowed to go through the "door of hope," pillcobuncu, covered with feathers of the bird of hope. Those who had come so far might now worship the holy cliff, but they were not allowed to touch the face of the cliff nor to walk upon it. Sacrifices to it were small children, whose heads the priests cut off with sharp stones. The sacrificial stone of the Island of Titicaca still remains, rubbed smooth by the iron tooth of time, split into three pieces by a thunderbolt. So does the queen's meadow below the terraces, where the carmine, yellow, and white cantut, flor-del-Inca, recalls the blazing color of other days, when fruit ripened here twelve thousand feet above the sea, and maize of which Sunvirgins made the bread of sacrifice.

Beyond, is the island called Coati, consecrated to the Moon, where her temple used to be. The

life-size statue of a woman was found here, gold in the upper half, silver in the lower.

The Fountain of the Incas still gushes two streams of clear water. "A stolid Indian sits watching it pour away, never dreaming whence it comes, as no one, indeed, knows."

CHAPTER III

MYTHS AND MONUMENTS

I

THE Indian worshipped the Inca, his sovereign, because of his divine origin, being the descendant of Manco Ccapac, founder of his race, who was the son of the Sun. Thus, religion was the substance of the empire. But as the Temple of the Sun at Cuzco was a pantheon of idols, sacred each one in the mind of some visiting chieftain, though always remaining the Sun Temple, so the religion itself was a synthesis of all the beliefs which those idols represented; blended yet dominated by the all-searching light of the Sun. This may explain, for instance, the confusion of Pachacamac, the supreme deity of the ancient coast tribes, with Uiracocha of the mountains, whom Acosta, among others, declares to be one and the same. Clear-cut dis-



A SWINGING BRIDGE NEAR JAUJA.



tinctions are impossible. The stories are all vague, even among confident writers of legends.

As to the Sun's descent, the wise men of the Incas learned from their predecessors that he was made by The Ancient Cause, The First Beginning, The Maker of All Created Things, The Supreme Deity, Illa Tici Uira Cochathe four ultimate, visible forms of the Infinite. to quote the Peruvian Star-chart of Salcamayhua. There is in Quichua a word to express "theessence - of - being - in - general - as - existentin-humanity." Sometimes the name is given as Con Tici Uiracocha, an identification with the supreme god, Con, the center of another group of legends of belief. The mystery surrounding this great, invisible god, generally called Uiracocha, is as complete now as it was to the Sunworshipping Incas, a sort of dim background for the glittering splendor of Sun-ritual.

Uiracocha has many identities: Uiracocha, the Supreme God; Uiracocha, the hero-god, the white and bearded man in long robes, who with a strange animal in his hand, appeared to that Inca afterwards called by his name, tending the flocks of the Sun among the tops of the Andes;

Uiracocha, who raised up an army for the Inca on the Field of Blood out of stones that he set on fire from a sling of gold; he who changed the revelers of Tiahuanacu to stone in wrath. (However misty the connection between Uiracocha, stones, and human beings, it is certain that Peruvians held stones in great awe. The temple to Uiracocha, the war-god, is at the foot of an extinct volcano whence a lava stream had issued. It is paved with black and made of carved and polished stone. The interior was obscure, with an altar for human sacrifices.) Uiracocha who, as Betanzos relates, came out of a lake when all was dark, lord of light and lord of wind, who, as dawn appeared, spread his mantle over the waves of the lake and was wafted away into the rays of morning light. The curling waves followed his evanescent passage, and so he was called Uiracocha, the Foam of the Sea. He gave his wand to the chief in the House of the Dawn. It afterwards became the golden staff of Manco Ccapac, his son.

Uiracocha was the universal god of the Quichua-speaking people. The Sun was peculiar to the Incas.

The hazy red deity Con was the personification of subterranean fire. "He is light as air, has neither arms nor legs, nor muscles nor bones, nor joints nor nerves nor flesh, but runs very fast in all directions." He came from the sea and flattened the hills and filled up the valleys, and by his simple word gave life to man. Viciously he converted the race of men he had created into black cats and other horrible animals, devastated the earth, deprived it of rain, and — retreated into the sea. His first temple was a volcano.

This left a free field for his equally omnipotent, equally hazy brother Pachacamac, who benignly created another race of men. Since Pachacamac was invisible and beyond their conception, the Incas built him no temples, but gave him secretly a superstitious worship, bowing their heads, lifting their eyes, and kissing the air as evidences of the reverence they felt at the mention of his name.

Here is a prayer reported by Geronimo de Ore: "O Pachacamac, thou who hast existed from the beginning, and shalt exist unto the end, powerful and pitiful; who createdst man

by saying, 'Let man be;' who defendest us from evil, and preservest our life and health; — art thou in the sky or in the earth, in the clouds or in the depths? Hear the voice of him who implores thee, and grant him his petitions. Give us life everlasting, preserve us, and accept this our sacrifice."

The Inca mind could not reconcile the anterior existence of Uiracocha, Con, and Pachacamac with Sun-supremacy. We find them all called sons of the Sun, and so their importance could consistently fade away.

The origin of the two first Incas was mystery-veiled. Men discussed whether they were saved from the primeval waters robed in garments of light, or whether they came from three shining eggs laid by the lightning in a mountain cave after the deluge. Did they escape from the lower world through a giant reed, or were they imprisoned in a cave, over which Uiracocha appeared with wings of brilliant feathers to give Manco Ccapac the insignia — the scarlet fillet and the round gold plates? Some thought they emerged from Paccari-tampu, the Lodgings of the Dawn, not far from Cuzco. They had been

led thither through caverns of the earth. Sarmiento relates that the Incas came out of a rich window, by order of Uiracocha, without parentage. The first Inca had an enchanted bird and a staff of gold, and came conferring fairy-tale benefits to mankind.

The legend most widely accepted taught that the Incas, who in the person of Manco Ccapac and his wife and sister Mama Ocllo came out of the cave of Paccari-tampu, were children of the Sun. He himself placed them on the Island of Titicaca and told them to wander until they should reach a place where their wedge of gold would be swallowed up by the ground at a touch. There they should build the capital of their empire. At the foot of the fortress of Sachsahuaman it disappeared, and so the city of Cuzco, the Navel of the World, was founded.

The poetic fiction of all these legends conceals an historic background of curious details. But with Father Acosta we should consider that "it is not matter of any great importance to know what the Indians themselves report of their beginning, being more like unto dreams than to true histories." He continued: "They

believe confidently they were created at their first beginning at this new world where they now dwell. But we have freed them of this error by our faith, which teacheth us that all men came from the first man."

Besides all this maze of divinity and a symbolic astronomy, everything in nature had for them a soul that they might pray to for help. Not only the sun, moon, stars, thunder, and lightning, the rainbow, the elements, and rivers, but that deep sea from which they issued had a mysterious worship. They adored high mountains, homes of majestic gods whom they never saw, whence streams proceeded to water their terraces. They sacrificed to distant objects by blowing the ashes of burnt sacrifices into the air, offering them to the hills and to the wind. They adored all great stones, the mouths of rivers, all things in nature different from the rest, and offered to them small stones or a handful of earth or an evelash.

Moreover, there was an elaborate fetishism. They had idols with a personal interest; they carried talismans; they had miniature domestic altars, where they offered *chicha* or flowers.

They tried to appease things that might injure them. They drank a handful of water from a dangerous river before crossing, and ate a bit of the stone which had harmed them, and offered in sacrifice a leaf of coca. The mysteries of coca epitomize the country where it grows. It not only fortifies the teeth, controlling mountain sickness, preventing fatigue, keeping off disease, strengthening broken bones; it cheers the spirit and invigorates the mind, and gives courage to perform impossible tasks.

Its juice softens hard veins of metal. The odor of burning coca propitiates the deities-of-metals, who would render the mountains impenetrable without it. Coca-leaves in the mouths of the dead insure a welcome in lands beyond.

No wonder it was the divine plant of the Incas. A sacrifice at festivals, its smoke an offering to the gods, whose priests chewed the solemn herb to gain their favor, it was a benediction for any enterprise. Mama-coca, its spirit, was worshipped.

Coca, preferred to gold, silver, or precious stones, was dubbed by the Spaniards "una elusión del demonio."

 \mathbf{II}

Almost as well known as the stories of silver and gold from Peru are those relating to its mammoth buildings made of mammoth stones. The ruins are a better witness to the greatness of the ancient Peruvians than the wealth looted from them.

It is the first fact mentioned by a homecoming traveler that there is a twelve-cornered stone in the Street of Triumph in Cuzco, and into and around each corner other stones are so perfectly fitted that a knife-blade cannot be inserted between them. That fact is perfectly true. So also is the fact that ancient Peruvians transported stones weighing tons with llamas and human beings as their only beasts of burden. They lifted them to great heights without machinery, cut them without steel implements, blasted them without gunpowder, and polished by rubbing them with other stones and bundles of rough grass. They had no resources in building but their own energy. The vast "stones were raised by social

institutions, supplying want of instruments by numbers of people." This world of ruins, comparable to Egypt, "is isolated in the region of the clouds."

Stupendous scenes upon these elevated plains were object lessons — nearness of gigantic peaks, appalling depth of chasms. The Incas learned much from nature: from salt-strewn deserts to lay waste their criminals' property, sowing their fields with salt; from the sea, maker of terraces. They finished off the mountain-sides with small andenes, or hanging gardens, which received the flow of water bestowed by the Inca upon his subjects with every patch of ground. They brought loam from the jungle in baskets and created land upon bare rocks. Where opportunity offered, the terraces widened, following the natural excrescences of the mountain.

And when nature failed to point lessons, models were provided by far-receding civilizations so remote that they almost seemed to have relapsed into the domain of nature. Each served as the foundation for the next, like the rhythmic life of the jungle.

Ancient Peruvians hesitated at nothing.

They built an artificial city on a high, cold, almost waterless, plain, with a palace for the Inca to visit in, a garrison for his protection, and magazines and granaries for his soldiers' food. Countless royal palaces, too, their niches covered with plates of gold, and convents like the House of the Virgins of the Sun in Cuzco, were duplicated all over the empire for other wives of the Inca as he chose among them, "storehouses sheltering his tribute in women." There were baths and fountains and places of pleasure and round stone *chulpas*, towers of the dead.

Since no one traveled except by order of the Inca, the highways were reserved for himself, the armies, and the *chasqui*, or royal runners. From Zarate to Humboldt, they have been described as fit to rank with the seven wonders of the world. One highway pierced walls of solid rock, crossing profound chasms and the treacherous marshes of the *puna* on walls of solid masonry. Being a pedestrian road, it slipped in flights of stone steps over the brow of the mountains. It traversed the whole empire for two thousand miles among the mountain-tops. The other, flanked by mud walls,

lay along the low deserts of the coast, "shaded by trees whose branches hung over the road loaded with fruit, and filled with parrots and other birds," to quote Cieza de Leon. Humboldt said that "part of the coast road was macadamized."

At regular intervals, "every ten thousand paces," tambos were scattered along the roads, houses of pleasure for the Inca and waitinghouses for the relays of messengers of the Sun as they bore news of royal necessity, or brought fish from the sea or other delicacies from distant. provinces to the Inca's table. Garcilasso describes the stone stairs up to these inns "where the chairmen who carried the sedans did usually rest, where the Incas did sit for some time taking the air, and surveying in a most pleasant prospect all the high and lower parts of the mountains, which wore their coverings of snow, or on which the snow was falling, for from the tops of some mountains one might see a hundred leagues round."

The Incas threw a swinging osier-bridge of spider-web construction across a vicious torrent to lead their armies over. So-called historians

tell of bridges of feathers used in Inca days, but, as Garcilasso adds, "omit to declare the manner and fashion of them!"

The secrets of the Inca ruins are not yet told. For their industry moulded underground as well, connecting palaces and convents by hidden passageways, and chambers and depositories for army supplies like those made by the great Yupanqui in his campaign against the Chimus.

The subterranean system of water-works was stupendous. Near Cajamarca is a channel several hundred miles long paved with flagstones throughout its entire length. It forms the outlet to a little lake. Another aqueduct traversed the whole province of Cuntisuyu, twelve feet deep and over one hundred and twenty leagues long, leading waters of the snows to barren plains. Water was stored in cisterns on the mountain-tops. "They conducted rivers in straightened channels through hills of solid rock," they brought water through pipes of gold from distant hot and cold springs, whose sources are now unknown. It trickled into the baths of the Inca through golden jaws of animals, birds, or snakes, and then welled



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AN HEIR OF THE "MAKERS OF RUINS."



over through properly regulated pathways to the terraces, where growing things were in want of irrigation.

This civilization had taken ages to evolve, as the development of certain plants and animals alone would show. It was reduced in a few years to an empire of ruin. One shivers at the "hideous energy of destruction evinced by man." But in spite of all that has been done to annihilate the achievements of the Incas. benefits accruing from them still remain. "Makers of ruins" indeed, yet by them the present flimsy civilization exists. Upon their terraces, climbing to the mountain-tops, Indians now live in mud huts, little towns clutching at a far-off slope, apparently deserted but for the cemetery. Irrigating prospectors stand aghast before their mighty systems. The railway builder may take lessons in road construction.

There is practical value in ruins, if from them comes inspiration for modern industry. And there is poetry in ruins, because they speak of men and things which are gone, never to return, "the shrines of by-gone ideals, makable when they were made and then only."

CHAPTER IV

THE INCA AND HIS EMPIRE

No one dared to look upon the Inca, as he radiated the light of his divine Sun-father. He lived and ruled as a deity, representative of God, supreme arbiter of all creatures breathing the air or living in the water. "The very birds will suspend their flight if I command it," Atahualpa once said. His person being holy, his body after death, preserved in its living likeness, was still worshipped. Carried about on a golden litter, the Prince Powerful in Riches moved from palace to palace, and his feet never touched any but sacred ground, consecrated by his contact, if not previously hallowed. To carry his person was so singular an honor that his weight was not a burden, as cultivating his fields was a labor performed with hymns of joy. This Sun of Cheerfulness passed beneath flower-covered arches, while his bearers crushed out sweet odors from flowers beneath their

feet. Indeed, "the shouts of the multitude as he passed along caused the birds flying over to fall to the ground!"

If these "facts" seem more like romance than truth, they have at least masqueraded under the guise of history for more than three hundred years.

The Inca was clothed in garments made of the silky hair of the vicuña, which lives above the line of perpetual snow. Woven as they were to be worn, from threads of invisible fineness, the soft garments were made by cloistered Virgins of the Sun. They were enriched with bits of gold, silver, emeralds, a fringe of gorgeous feathers, and with mother-of-pearl. Pearls were not used, as their "search endangered the lives of the seekers." The Inca wore a suit but twice, then conferring it upon some person of royal blood. These were the garments taken as sumptuous gifts to the monarchs of Spain.

Many were the Incas' marks of distinction. Their heads were shorn, all but one lock, as Manco Ccapac had ordained. The "shearing" was done by means of a sharp flint. Another

distinction was enlarging the velvet of the ear by inserting ornaments, so that it reached the shoulder, suggesting the Spanish title, *Orejones*.

The peculiar badge of the Inca was a fringe encircling his brow, called the *llautu*, "the mark whereby he took possession of the realm, a red roll of wool more fine than silk, which hung in the midst of his forehead." And his chief distinction, worn in his colored wreath and pointing upward, were the two long pinions of the corequenque, that mysterious pair of birds which, isolated in a snowy desert beside a little lake, lived at the foot of an inaccessible mountain. Though there are other snowy deserts and other little lakes and other inaccessible mountains, no similar pair of birds could ever be found. In fact, there never were but two alive at the same time - symbol of the two original parents. They recall the screaming oo, a blackbird of the Hawaiian Islands, famed for concealing under each wing a single yellow feather, used in making those magical feather cloaks for the kings on ceremonial occasions.

Each Inca must have new pinions, as each must have his new palace, for the apartments [190]

of a dead sovereign were closed at death; his golden utensils, jewels, and treasure were buried with him. Men and women, practised in the art of lamentation, cried for one year after his death, when his account was closed. Then the heir "bound his head with the colored wreath" and started forth through his dominions.

With the rainbow as their emblem, even Inca facts had distinctive colors and were interwoven with facts of other colors, ideas being expressed directly without the technique of words. Knots in a parti-colored twist were their hieroglyphics, the famous *quipus*, and the Officers of the Knots were their historians. They intertwined the bright filaments of different sizes as well as colors, and tied into remembrance everything from laws and army supplies to ballads of the poets, sung on days of triumph.

Such a Sovereign-deity as the Inca could force the equality of all his people, commanding them to be happy. Here was a whole nation moved by sameness of will — desire to please their sovereign. Observance of law was natural to these industrious subjects, who were treated with absolute justice by an absolute

despot. Each was just as well fed, just as well clothed, just as well housed, just as well amused, as his neighbor. Emissaries from the king inspected his neighbor to see that it should remain so. All persons had to allow messengers from the Inca to inspect what they were doing at any time. Such as were found commendable were praised in public. Such as were idle and slovenly were scourged on the arms and legs. One punishment was whipping by a deformed Indian with a lash of nettles.

"There never could be any scarcity or famine, for, if a man failed to take his turn at the water for irrigation, he received publicly three or four thumps on the back with a stone . . . shamed with the disgraceful term of . . . mizqui tullu, being a word compounded of mizqui, which signifies sweet, and tullu, which is bones."

As labor was the only tribute, the rich were not taxed more than the poor. The blind were required to cleanse cotton of seeds and rub maize from the ears. "The old men and women were set to affright away the birds from the corn, and thereby gained their bread and clothing." No one, however impotent, could



INDIAN WATER CARRIER, SICUANI.



escape tribute. The poorest gave lice, "making themselves clean and not void of employment in so doing." Who, indeed, were the poor? Those who were incapable of work, who had to be fed and clothed out of the king's store.

"There were no particular tradesmen . . . but every one learned what was needful for their persons and houses and provided for themselves."

Laws would hardly seem necessary to control so exemplary a nation. Here, however, are a few paternal laws, thought necessary by the Lover of the Poor: against the adornment of clothing with gold and silver and jewels; against profuseness in banquet and delicacies in diet; against the ill manners of children; of good husbandry and hospitality; providing a new division of lands every year, according to the increase and diminution of families; punishing those who destroyed landmarks or turned the water aside; devoting the services of all master workmen to the Inca, and supplying them with gold and silver and other materials for the exercise of their ingenuity.

Since the Sun-god, or the Inca, had be-[193]

nignly bestowed them for the people's good, laws received the same veneration as the precepts of religion, from which no subject of the Incas could dissociate them. A breaker of the law was guilty of sacrilege, and no punishment could be too severe. In fact, most crimes were punishable by death. The sinner was thrown over a precipice or into a ditch of serpents, jaguars, and pumas. The worst sin of all, high treason, exacted in expiation not only the death of the sinner, but that of his family, even of his neighbors. His very trees were pulled up by the roots, and his fields sown with salt. "But as there was never any such offense committed, so there was never any such severity executed," a mitigating remark of Garcilasso in connection with a certain crime.

The basis of the Inca government was tribute, personal labor given to the Sun and to the Inca, a source of continual delight, a supreme privilege. So the Sun, or his representative the Inca, was furnished by his people with food, tilled by them from his own ground; clothing for his soldiers or his needy from the wool of his own flocks; bows and arrows, lances and

clubs, ropes for carrying burdens, helmets and targets each where most easily procurable. Temples and palaces of the Inca, his aqueducts, roads, and bridges were built with hymns of rejoicing. The laborers never got out of breath so as to spoil the cadence of the hymn of triumph; the chroniclers fail to say whether in obedience to law or from a sense of good taste.

In addition, all the provinces paid tribute of the most beautiful women, who were kept in convents as wives of the Inca; and he might choose any who suited him.

The great maxim of the Incas was increase of empire, their plea being the best interest of the tribes they were to conquer. The Inca sent word that he would come "not to take away their lives or estates, but to confer upon them all those benefits which the Sun, his father, had commanded him to perform toward the Indians. He (would come) to do them good, by teaching them to live according to rules of reason and laws of nature, and that, leaving their idols, they should henceforward adore the Sun for their only god, by whose gracious command he had received them to pardon. To which

end, and to no other purpose (for he stood in no need of their service) he traveled from country to country."

So well did most of the surrounding tribes realize this, that messages of submission came before the conquerors had even turned in their direction. If it happened that because of ignorance they held out against the benefits an indulgent sovereign was waiting to bestow, the Inca's messengers informed them of his exact intentions. All good gifts would be theirs, provided only they would renounce their independence, their language and religion, and send their chief god as an hostage of submission to the Temple of the Sun in Cuzco. Honored servants of the Inca would come to them in return to acquaint them more in particular with the new benefits they were about to receive. Skilled workmen would teach them the arts. The sons of their cacique (chieftain) would be sent to Cuzco to receive instruction. Moreover, the Inca would confer upon them the garments worn by his own gracious person.

Nearly all perceived the wisdom of such a course at once. But if in blindness any still [196]

rebelled, messengers brought word that "the Inca pitied their folly which had so unnecessarily betrayed them to the last extremity of want and famine." For enlightened they were to be, in spite of themselves.

Wonderful are the tales of these victorious campaigns, for the Inca's army never knew defeat. The soldiers were as plentifully supplied from vast granaries as if in Cuzco. If the march led through lowlands, the entire army was relieved every two months. Though the Indians of the mountain-tops did not object to cold, they succumbed to fevers soon after descending into the comfortable valleys. When a new province had been incorporated, the gracious Inca "confirmed the right of possession to the natives of it."

The empire extended from the Chibchas and Caras of Ecuador, beyond the Chilean deserts. Only one region dared defiance; that was the primeval jungle. The armies might skirmish about upon its edges, and exact exotic tribute of the savages who ventured forth. But within its grim interior they were secure.

In the provinces of Antis, people "killed one [197]

another as they casually met," and worshipped a jaguar, the original lord of the jungle. They sacrificed hearts and blood of men to huge snakes "thicker than a man's thigh." They made war only to eat the flesh of their enemies. They were called "nose of iron" because they bored the bridge between the nostrils to hang in it a jewel or long piece of gold or silver. With a handful of men, Yupanqui visited these savages below the Andes and imposed worship of the Sun. With a handful of men, the Spaniards wiped the great organization of the Empire of the Sun off the face of the earth and established upon its ruins a Christian civilization.

The people in the Valley of Palta bound tablets upon the head of a new-born child and tightened them each day for three years, until the skull was elongated, in order to fit the pointed woolen cap which it was the fashion to wear.

The Chachapoyas wore a black binder about their heads, stitched with white flies, and instead of a feather, the tip of a deer's horn. Their chief weapons were slings bound about

their heads, and they adored the condor as their principal god.

The Chancas were the most dangerous opponents of Cuzco, a powerful race owing their origin to a jaguar, who dressed in skins of their god and carried effigies of jaguars with a man's head to their sacrifices of children, by whose eyes they prognosticated.

The caciques of all dependent tribes were obliged to appear once a year at court, or if they lived very far away, once in two years. They brought with them gold and silver from their mines, for all such things were devoted to worship of the Inca. Failing these, they presented jaguars, droll monkeys, parrots, wondrous condors, and giant toads and snakes that were very fierce, kept in dens for the grandeur of the court. People from all climates presented indigenous gifts, the most beautiful or the most curious of any creature or plant within their domains. Any known thing preëminent in any way added the name of its peculiar excellence to the titles of the Inca. His court in Cuzco consisted of more than eight thousand persons, nobles who traced descent from the

Sun, and representatives of all the fantastic tribes blest by the Inca's clemency. Even the greatest lords carried bundles in his presence.

The noble city of Cuzco, where the children of Inti first stopped with their wedge of gold, was itself worshipped. Those who lived in Cuzco had a certain superiority. Divisions of the city were the Terrace of Flowers, the Lion Picket with the dens of pumas, the Field of Speech, the Quarter of the Great Serpents, the Scarlet Cantut — the flower of the Inca — the Holy Gate, the Shoulder Blade, the Seaweed Bridge, and so on, bounded by small streams and long, somber walls of perfectly fitted stones.

Up above the city hangs the stupendous fortress of Sachsahuaman, exceeding all the seven wonders of the world, a cyclopean work of the primitive age. Squier says: "The largest stone in the fortress has a computed weight of 361 tons." Sachsahuaman must indeed have been raised by enchantment in a night like Tiahuanacu, for it surpasses the art of man, the labyrinth of passageways contracting here and there so that a single man could keep back an army, subterranean tunnels leading to temples



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and palaces of the city. From the inmost recesses of the fortress, a fountain of clear water bubbles. Its mysterious murmur fills the secret passageways.

Even a single stone destined as a part of the fortress partakes of the enchantment. According to legend, twenty thousand Indians had dragged it from a distant quarry, up and down over the wild mountains. Once it fell, killing "three or four thousand of those Indians who were the guides to direct and support it." And when, after its painful journey, the monster finally beheld the lofty fortress of which it was to form a part, it fell for the last time, shedding bloody tears from the hollow orbs of its eyes. It still lies on the same spot, receding deeper and deeper into the ground whenever attempts are made to remove it.

CHAPTER V

SERVICE OF THE SUN - GOD

"In the beginning there arose the golden child. He was the one born lord of all that is. He established the earth and the sky.

"Who is the god to whom we shall offer sacrifice?

"He who gives life; he who gives strength; whose command all the bright gods revere; whose light is immortality; whose shadow is death. He who through his power is the one god of the breathing and awakening world. . . . He whose greatness these snowy mountains, whose greatness the sea proclaims, with the distant river. He through whom the sky is bright and the earth firm. . . . He who measured out the light in the air, . . . wherever the mighty water clouds went, where they placed the seed and lit the fire, thence arose he who is the sole life of the bright gods. . . . He to whom heaven and earth, standing firm by his will, look up, trembling inwardly. . . .

"May he not destroy us! He, the creator of the earth; he, the righteous, who created heaven." — Hymn of Indian

Sun-worship from the Rig-Veda.

Primitive peoples usually adore that natural force which is their greatest good. Gratitude for benefits conferred is the basis of all pagan religion. Primitive peoples also worship the [202]

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sky and the bright objects within it. Sun worshippers combine the two.

Inti, the Sun, child of the Universal Spirit, is his mighty emblem, a symbol of his uncreated glory, the quickening principle in nature, the great wizard of Peru, the only source of vitality upon earth, by whose energy the winds arise, the glaciers slide over the mountains, by whose energy even the rain descends, the rivers swell, and cascades leap through the valleys down toward the sea. In how much more real a sense than the Incas knew is Peru the land of the sun!

The Sun, ruler of the stars, together with Quilla, the Moon, ruler of winds and waters, his sister, wife, and queen, created beautiful Chasca, the Dawn, "whose time was the gloaming and twilight, whose messengers the fleecy clouds which sail through the sky... and who, when he shakes his clustering hair, drops noiselessly pearls of dew on the green grass fields."

The light-rays emanating from the Sun and the morning star of double course are his messengers, bringing strength and power. They precede to announce his coming in the morn-

ing, and follow him as, by the force of his power and heat, the sea parts in the evening to receive him.

The name of Sun-temples in Peru was Intihuatana, the binding of the Sun, the place where the eternal light or fire was held fast. Though there were many such throughout the kingdom, the Holy of Holies was at Cuzco, the Place of Gold. Inti-cancha, oriented to the sunrise, golden crown gleaming, sheltering walls and cornices lined with gold plates under its roof of straw. There flamed the great golden image of the Sun, glistening with emeralds and other precious stones, completely covering one side of the temple opposite the eastern portal. The mummies of all former kings, perfect replicas of themselves, sat staring as in more active days from their thrones of gold along the walls, the eyes shining with a mixture of gold. "And so light were these bodies that an Indian could easily carry one of them in his arms to the houses of Spanish gentlemen who desired to see them."

Beyond, twinkled the temple of the Moon, the Sun's *coya*. The queens, her descendants, [204]

SERVICE OF THE SUN-GOD

were also called *coya*, "not being worthy a title so truly magnificent as Inca." This was the Place of Silver, surrounded by the dark shadow of night, receiving the silent homage of the queens, the sister-wives of the Incas, reposing on silver thrones. At full moon the festival of the deities of water was held here.

A white cross of crystalline jasper hung from a silver chain in a secret place. The white light in it increased and decreased with the moon. It was beneficent and associated with the morning light, whose compartment came next, sacred to the Dawn with the Morning Star, chasca coyllur, ragged with earth mist, he of the long curling locks, the page of the Sun. The royal runners were named for him, messengers of the Inca as he of the Sun. All the other stars, companions of the Moon, which vanish at the coming of the Sun, glittered each in its proper magnitude from a starry ceiling.

The temple belonging to Thunder, Lightning, and the Thunderbolt — servants of the Sun, but messengers of an angry god — shone with tiles of gold, but was without symbol. As the arms of the Inca, the dread liquid fire which

darted from heaven like a golden serpent with quick spring and mortal bite, surrounded the Rainbow, beautiful cuychi, whose image spanned one wall of the room beyond, a multicolored ray of the Sun, flickering over the showery hillside, announcing his gracious reappearance after the tempest and promising peace. The all-powerful Sun could subdue the dark cloud and draw from its depths the shining rainbow, whose fragile arch widens as the Sun sinks. He lives in the clouds, and the rainbow is the hem of his garment. Is it strange that the Incas should have held it in such veneration. that when they saw it in the air they shut their mouths and clapped their hands before it? Is it not stranger that they only should have worshipped the rainbow and placed it on their banners as an emblem of God?

All the priests of the Sun in Cuzco were of the blood royal, a privileged class. As many as thirty thousand officiated in Inti-cancha. They washed the sacrifices in fountains of water which bubbled up in golden cisterns and celebrated the great festivals in glittering dresses of feathers with drums of serpents' skins.



A MARKET IN HUANCAYO.



SERVICE OF THE SUN-GOD

In Acllahuasi, near by, lived a thousand virgins, the most beautiful of all the pure blood of the Sun, destined as his wives, and watched over by their mamacunas. Visited only by the coya, they spun the fine vicuña garments for the Inca's use and sewed upon them little plates of gold and emeralds. They wove and embroidered the royal coca bags which the Inca hung upon his left shoulder. They made the sacred llautu with the colored fringe, and the strawcolored twist for the head of the prince royal. They gathered bones of white llamas and burned them with linen they had spun. Then they collected the ashes, and looking toward the east, threw them into the air, an offering to the Sun. They made bread for the festivals of the Sun and the chicha drunk by the Inca and his kindred, in kettles of gold and silver. For recreation they went out to walk in their garden of silver and gold.

Nearly half the year in the Empire of the Sun was given to celebrating—everything from the first day of the moon to the day of marriage of the royal brides, *coyaraymi*. The beginnings of the four seasons were festivals. At the ver-

nal equinox degrees of chivalry were taken by young nobles who, having gone through all possible tests, fasting, and temptation, received at last the kiss upon the shoulder and the jab through the ear-lobe given by the Inca with a nail of gold.

At the autumnal equinox all subjects were cleansed of whatever troubled them, when, purified with children's blood, they asked the midday Sun to protect them from outward calamities and inward diseases. A messenger of the Sun with a gold-studded lance, fluttering feathers of many colors along its length, ran down from Sachsahuaman to the center of the city, where four sons of the Sun waited with lances to be touched by him, and scatter to the four quarters of the earth at the Sun's command, all evils which beset mankind. Each ran six leagues in his separate direction to spread the good news. People shook their clothes. The evils of night were driven out by lighted torches, which were then thrown into a stream and extinguished before being borne away. Confession of sins followed.

The greatest feast was Intiraymi, the Binding [208]

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of the Sun, when his southern shadow grew no longer, when the Sun-god by some unknown power was hindered from progressing farther. This was always a mystery. Tupac Yupanqui had said: "Many say that the Sun lives, and that he is the maker of all things. . . . Now we know that many things receive their beings during the absence of the Sun and therefore he is not the maker of all things; and that the Sun hath not life is evident for that it always moves in its circle and yet is never weary, for if it had life it would require rest as we do and were it free it would visit other parts of the heavens unto which it never inclines out of its own sphere. But as a thing obliged to a particular station, moves always in the same circle and is like an arrow which is directed by the hand of the archer."

Later, Huayna Ccapac said: "There must be some other whom our father, the Sun, takes for a more supreme and more powerful lord than himself; by whose commands he every day measures the compass of the heavens without any intermission or hour of repose; for if he were absolute and at his own disposal he would

certainly allot himself some time of cessation though it were only to please his own humor and fancy without other consideration than that of liberty and change."

But to continue with the festival of the summer solstice. At peep of day the Inca and all the nobles of the blood of the Sun went in procession under canopies of feathers to await his arrival. Foreign princes and distinguished vassals, in garments plated with gold and silver, skins of jaguars, and condors' wings, assembled at a little distance, the whole people filling the streets of Cuzco. All barefoot, crouching, they waited, looking toward the east. Hardly had the first rays touched the snowy mountain-tops when a loud shout of joy, songs of triumph, and deafening music on rude instruments broke from the multitude. It grew louder and louder as the god, in rising, shed more and more light upon the people. They raised their arms, opened their hands, and kissed the air so filled with light.

The Inca, rising, greeted the pomp of dawn. He held two great bowls of gold filled with chicha in his hands: the contents of one he

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poured into a golden channel leading to the temple, and the vapor rising in the heat, it seemed as if the Sun himself were drinking. The contents of the other he shared with all his kindred, pouring it into little golden goblets.

Then they all proceeded to the temple. Outside, the curacas, or governors, offered to the priests images of many different animals of gold, while the Inca and all the legitimate children of the Sun went in and presented the goblets he had consecrated to the image of the Sun. There were sacrifices of flocks of black llamas, the particular property of the Sun, from which prognostications were made. The animal to be sacrificed was held fast, and with a sliver of black obsidian its breast was opened and the heart torn out. Sometimes as many as two hundred thousand llamas were sacrificed during a year.

It is a horrid chapter from the Incas' story that they made human sacrifices along with everything else which they valued. Von Tschudi says that they offered to the Sun as many as two hundred children at one time. "The children were strangled and buried with the silver

figures of sheep, having first walked around the statues of the Creator, the Sun, the Thunder, and the Moon. Sometimes they were crushed between two stones, sometimes their mouths were stuffed with ground coca."

The fire for sacrifice was a direct gift of the Sun, kindled from a great polished bracelet upon the left arm of the high priest. The Virgins of the Sun bore away some of it to care for during the following year. No more unhappy omen could occur than its extinction.

The Inca sat within view of all, mounted upon his gold seat, drinking to his kindred and to the curacas in order. The cups his lips had touched were kept as idols.

The Sun had drunk of their offerings; he had kindled their sacrificial fire; he now entertained his subjects with a banquet prepared by the hands of his own Virgin-wives. As three days of universal fasting had preceded the feast of the Sun, so for nine days reveling followed. They ate the bread of the Sun Virgins, and drank their *chicha*, they shouted and danced and masqueraded, each tribe of the empire with differing head-dresses of feathers and grotesque



IN A FERTILE VALLEY OF THE UPLANDS.



SERVICE OF THE SUN-GOD

masks according to the fashion of their country. "They cast flowers in the highways, . . . and their noblemen had small plates of gold upon their beards, and all did sing."

CHAPTER VI

INDIANS AND LLAMAS

Had the Indians of the sixteenth century not known that their overthrow was the will of Pachacamac, the miracles constantly favoring the Spaniards would have forced them to recognize the fact. Pious chroniclers tell of Saint James on a white horse, who came with glistening sword to turn the tide of battle, and of the Virgin Mary, whose appearance in the clouds blinded the hostile Indians.

The Incas could but succumb to the sovereign will. Some retreated beyond the mountains, leaving indelible traces upon the people of the jungle. Some were thrown into fortresses, which "their ancestors had built for ostentation of their glory." On the authority of Garcilasso, thirty-six males of the blood of the Sun, who had been condemned to live in Lima, the Spanish City of the Kings, had in three years' time all died. Sayri Tupac, a nephew of Ata-

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hualpa, had come to Lima for the privilege of renouncing his sovereignty. The amautas had consulted the flight of birds as to whether he should surrender himself to the Spaniards, but as Garcilasso says: "They made no inquiries of the devil because all the oracles of that country became dumb so soon as the sacraments of our holy mother, the church of Rome, entered into those dominions."

"Ah!" said Sayri Tupac, as he lifted the gold fringe of the table-cloth, "all this cloth and its fringe were mine, and now they give me a thread of it for my sustenance and that of all my house." He was allowed to withdraw to the beautiful valley of Yucay, "rather to enjoy the air and delights of the pleasant garden formerly belonging to his ancestors than in regard to any claim or propriety he had therein." But he sank into a deep melancholy and died within two years.

The Spaniards were occupied with duels and assassinations of friends, bloody civil wars and religious disputes, usually about the Immaculate Conception. One can read volumes of such proceedings. Indian revolts were a constant

interruption. The Spaniards gradually discovered that it was impossible to keep the Indians quiet while an Inca remained alive; so in 1571, less than forty years after their arrival, Tupac Amaru, the last of the Incas, was put to death by the Spaniards in the following manner, as described by Garcilasso de la Vega in the words of his first English translation (1688).

"His crimes were published by the common crier, namely, that he intended to rebel, that he had drawn into the plot with him several Indians who were his creatures, . . . designing thereby to deprive and dispossess his Catholic majesty, King Philip the Second, who was emperor of the new world, of his crown and dignity within the kingdom of Peru. This sentence to have his head cut off was signified to the poor Inca without telling him the reasons or causes of it, to which he innocently made answer that he knew no fault he was guilty of which could merit death, but in case the viceking had any jealousy of him or his people he might easily secure himself from those fears by sending him under a secure guard into Spain, where he should be very glad to kiss the hands

of Don Philip, his lord and master. He farther argued that . . . if his father with two hundred thousand soldiers could not overcome two hundred Spaniards whom they had besieged within the city of Cuzco, how then could it be imagined that he could think to rebel with the small number against such multitudes of Christians who were now disbursed over all parts of the Empire." How little effect the words of Tupac Amaru produced upon the Spaniards can be judged by the following:

"Accordingly the poor Prince was brought out of the prison and mounted on a mule with his hands tied and a halter about his neck with a crier before him declaring that he was a rebel and a traitor against the crown of his Catholic majesty. The Prince not understanding the Spanish language asked of one of the friars who went with him what it was that the crier said, and when it was told him that he proclaimed him a traitor against the king, his lord, he caused the crier to be called to him and desired him to forbear to publish such horrible lies, which he knew to be so, for that he never committed any act of treason nor ever had it in his

imaginations, as the world very well knew. 'But,' said he, 'tell them that they kill me without other cause, that only the vice-king will have it so, and I call God the Pachacamac of all to witness that what I say is nothing but the truth.' After which the officers of justice proceeded to the place of execution. . . . The crowds cried out with loud exclamation accompanied with a flood of tears, saving, 'Wherefore, Inca, do they carry thee to have thy head cut off? . . . Desire the executioner to put us to death together with thee who are thine by blood and nature and should be much more contented and happy to accompany thee into the other world than to live here slaves and servants to thy murderers.'

"The noise and outcry was so great that it was feared lest some insurrection and outrage should ensue amongst such a multitude of people gathered together, which could not be counted for less than three hundred thousand souls. This combustion caused the officers to hasten their way unto the scaffold, where being come the Prince walked up the stairs with the friars who assisted at his death and followed by the



AN INDIAN PASTORAL.



executioner with his broad sword drawn in his hand. And now the Indians feeling their Prince just upon the brink of death lamented with such groans and outcries as rent the air. . . . Wherefore the priests who were discoursing with the Prince desired him that he would command the people to be silent, whereupon the Inca, lifting up his right hand with the palm of his hand open, pointed it towards the place whence the noise came and then lowered it by little and little until it came to rest upon his right thigh, which, when the Indians observed, their murmur calmed and so great a silence ensued as if there had not been one soul alive within the whole city. The Spaniards and the vice-king who were then at a window . . . wondered much to see the obedience which the Indians in all their passion showed to their dving Inca, who received the stroke of death with that undaunted courage as the Incas and the Indian nobles did usually show when they fell into the hands of their enemy and were cruelly treated and unhumanly butchered."

When they first stepped upon the shores of Peru, a Spaniard or two could travel hundreds [219]

of leagues alone through this foreign country on the shoulders of men and be adored as gods in passing. Before long, an army was not secure. A Spanish governor and his escort of thirty men were resting one day upon a high plain. The Indians, whistling to each other with bird calls and barking like wolves in the night, "went softly to the Spaniards' tents, where, finding them asleep, they cut the throats of every one of them."

Such deeds were being done in the Empire of the Lover of the Poor, the Deliverer of the Distressed, where formerly each individual had been forbidden to injure even himself.

The spirit of rebellion spread among the Indians. They tried to poison the water-supply of the City of the Kings. They tried to burn Cuzco, imagining they could burn the Spaniards with it. Their revolts culminated in that great rebellion of 1780 under José Gabriel Condorcanqui, called Tupac Amaru, whose descendant, through a daughter, he was. His followers swore their hatred of the white race and vowed not to leave a white dog, not even a white fowl alive. They even scraped the whitewash from

the walls of their houses. They did succeed in strangling a governor. In return, Tupac Amaru's tongue was cut out, and after seeing his wife, son, and brother tortured to death before his eyes, was himself sentenced to be torn apart by wild horses.

The men were slaughtered in such numbers that the women went out to help each other sow the fields. At sunset they returned, hand in hand, singing a melancholy lament, until this too was prohibited by Spanish law. All musical instruments were to be destroyed; the use of the Quichua language was forbidden; women were ordered not to spin as they walked; distinctive customs were to be laid aside. All lapsed into spiritless dullness. The air of desolation spread.

The Indians of Peru are a silent people trained by cold and cutting winds. They bite the end of their *ponchos* to show anger and live to an immense age. Their thoughts turn backwards. They grind their teeth on the same hard corn kernels as formerly and drink the same cornbrandy; they carry about as talismans little

effigies of llamas found in the graves of their ancestors and throw their criminals over the same lofty precipices. The juice of the red thorn-apple leads them into ecstasy, the only high light of their existence, for by means of it they communicate with the spirits of their ancestors. The only passion they have brought with them through the centuries is remembrance of the past. The thorn-apple is called huaca cachu, the plant of the grave.

The Indians squat about in groups with their little gourds of *chicha*. There is no laughing. The mummy-like babies do not cry. The lake on whose banks they live contains no fish. No worm, no insect, inhabits its banks. But there is a spirit which broods from the mountain above. He will lighten the burden of the traveler who seeks the mountain-top and presents him offerings in the depths of night. The *achachibas* or piles of stones are witness to his gracious power.

Between two mountain-tops lies a steelcolored lake shimmering in its stone basin. The Indians come here to beg for fire-water. They pour in brandy, standing on a peak while ma-

king their libation to the rain-god, and then leave without a word. Immediately the rain pours.

Only their religious festivals recall Inca feast Christianity has never been able to abolish the bacchanales of former times: it has merely changed their names. The call of triumph, haylli, has been changed to Hallelujah, Christian anthems are set to Indian tunes, IHS has been engraved on the stone doorways of antiquity. Over the shrines outside the churches are effigies of sun and moon. Above the megalithic fortress of Sachsahuaman three crosses preside where the banners once indicated the dwelling of the Children of the Sun. dians still salute the Sun temple on first entering Cuzco, though the nave of the Dominican church stands upon the spot where the Sun was worshipped in golden chambers, its Christian walls built of mammoth stones rolled together for the glory of the Sun. This superstructure typifies the methods of the missionary priests.

A wooden llama filled with fire-crackers is exploded on Good Friday. By the roadside, an [223]

Indian in a grotesque mask, with a feather crown and bells on his arms and legs, leaps in fantastic bounds to celebrate the day of the Holy Cross. A picture of the Virgin is carried about on her Ascension Day. The Indians, dressed in the masks of wild animals and multicolored feathers with bits of savage embroidery on their loose garments, dance about her to fifes and drum-beats and rattles of beans and snail-shells. Wild dances, horn-blowing, ugly voices screaming, and rattling tin — these heathen orgies swarm at the feet of effigies of Christ.

The Indian has to be content with the scanty earnings he can get from the transport of heavy burdens and from the wool of his llamas. By chewing coca he is able to run all day before the rider. His world is the valley where he lives. His occupation does not lead him to the mountain-top above, nor does his thought soar as far. His gloom sulks in his dress and manner of life, even in his songs and dances. When he reaches his little smoky hut, he eats his frozen and pressed potato, plays a wee tune on his quena and goes to sleep.

Self-sufficient because in need of nothing, the llama is the interpretation of the Indian. Both are products of the soil, like the *yareta* moss and the birds which swim in the icy water.

The dark-eyed llamas, with red-woolen tassels in their ears, move slowly across the icy plateau.

Could anything equal the dignity of a llama, his serenity, his hauteur? Why not? He knows he is indispensable. There is no one to take his place. His wool furnishes clothing, his skin leather, his flesh food, his dung fuel, and he is a beast of burden where no other can live on the bare, breathless heights.

In return, he asks no shelter, warm beneath his shaggy coat. He asks no food, for he grazes on the stiff ychu grass as he journeys along. He needs no shoes, no harness, and even provides, himself, the wool for the homespun bags lying upon his back. When there is no water, he carries in bags made of his own skin what is necessary for man. Nor do his benefactions end here. The llama furnished the mystery-loving Spaniards with that strange bezoar stone which, on account of its miraculous endowments, they

placed in the list with emeralds, pearls, turquoises, and other precious stones from Peru.

Is it astonishing that the llama makes his own rules of conduct and exacts entire consideration of them? Disobedience he indicates in a way not to be forgotten! And yet such is his docility that dozens are often kept within bounds by a single thread stretched around them breast high, — rugged little mountain beasts herded with worsted! Usually so gentle, if a llama is annoyed he becomes revengeful and useless. He never will hurry, for supplying his own food he must graze when opportunity offers. He will not be overloaded. One hundred pounds he will cheerfully carry, but with more than that he sits down like a camel. dreamily chewing his cud, and can be neither forced nor persuaded to rise. In speaking of the alpaca, cousin of the llama, Father Acosta said that "the only remedy is to stay and sit down by the paco, making much on him, until the fit be passed, and that he rise; and sometimes they are forced to stay two or three hours."

The little variegated herd, with expressions of mild surprise, step daintily along as if walk[226]



LLAMAS AT THE FALLS OF MOROCOCHA.



ing on eggs, following at even distances, each moving with authority of a whole procession. If frightened, they huddle into a compact group, craning their long necks toward the center. Then they look you wistfully in the face for minutes at a time without moving. The halter of the leader is embroidered, and small streamers flutter from it. Most of the llamas have tassels in their ears, or little pendants or bells. Thus they file across the snow-covered cordillera.

At night when they sink on to the *puna* at their journey's end, a faint murmur like many æolian harps is wafted into the perfect stillness of the frosty night. It is the llamas' appreciation of rest.



PART III

IN THE JUNGLE

The land lying between Peru and Brazil is a mystery "although the bounds be known of all sides. . . . Some say it is a drowned land, full of lakes and watery places; others affirm there are great and flourishing kingdoms, . . . where they say are wonderful things."

FATHER ACOSTA



CHAPTER I

A LAND OF ADVENTURE

WHAT a "hereditary spell" the jungle has had upon men! How smilingly its beauty allures — and how graciously it repels! Yet its beauty is not merely beauty. It flashes suggestions of wondrous lands beyond, bringing to the imagination a pleasure in its own vision like the joy of nature in her own loveliness. jungle is a region which men have always peopled with strange forms pleasing to their fancies, yet a region of dread, beyond human loneliness. It has sheltered in turn the desideratum of each age, while surrounding it with fearful mysteries. But though men have looked upon the jungle with awe, magic possibilities were still within and beyond. A chacun son infini.

Both Inca Rocca and Yupanqui attempted to conquer the jungle. Between Paucartampu and the Madre de Díos are vestiges of an Inca road.

But downpours and floods made roads give way to watercourses. The Incas called them "doorways" to the woods, which mountain rapids had opened by irresistible force; but no one could pass through. Even the executive Incas were obliged to turn back with only a fringe of jungle conquest, great campaigns resulting only in loss of life then as now. They retreated, submissive before nature's impregnable stronghold. There are tribes of strange, shy little people still showing traces of contact with the Incas. Although so long ago, they made a profounder impression than all subsequent invaders. Even if the conquered savages remained in the jungle after submitting to the Incas, they were obliged to pay tribute to them, observing the habits of their conquerors when they emerged. Those Incas, also, who withdrew into the woods to escape Spanish persecution, carried their customs with them. No matter how their influence was perpetuated, tribes still show the "footprints of Incas" in the surface of rocks, and even as far as the Mishagua are found legends of Incas' hidden treasure. With them in mind, the "big ears"

A LAND OF ADVENTURE

of some of the savages assume a strange significance.

Where the Madera and the Amazon meet there is a great island, a river island hundreds of miles in extent. Its name is Tumpinambaranas, and upon it are remains of gigantic buildings. Was this the fabulous country, Paytiti of mystery, powerful in riches, a legendary home of Manco Ccapac? Georg M. von Hassel is now investigating this hazy subject. The people of Tumpinambaranas had legends of a race, the Mutayces, who lived toward the south, "whose feet grew backwards so that any one who attempted to follow them by their track, would, if he were ignorant of this malformation, go farther from them."

Columbus breathed the sweet air which blew across from the forests near the mouth of the Orinoco and faithfully imagined it one of the four great rivers flowing from paradise. Had he only dared, he said, he would have liked to push forward to where he might hope to find the celestial boundaries of the world, and a little farther, to have bathed his eyes with profound humility in the light of the flaming swords

which were wielded by two seraphim before the gate of Eden.

The cavaliers in search of gold believed that El Dorado lived within the mysterious jungle. Their expeditions were imbued with awe. Adolph F. Bandelier has transcribed the source of the legend. It is the ceremonial of choosing the *uzaque* of Guatavitá:

"In front walked wailing men, nude, their bodies painted with red ochre, the sign of deep mourning. . . . Groups followed of men richly decorated with gold and emeralds, their heads adorned with feathers, and braves clothed in jaguars' skins. The greater number of them went uttering joyful shouts, others blew on horns, pipes and conchs. . . . The rear of the procession was composed of the nobles and the chief priests, bearing the newly elected chieftain upon a barrow hung with discs of gold. His naked body was anointed with resinous gums and covered all over with gold dust. This was the gilded man, el hombre dorado, whose fame had reached the sea coast. Arrived at the shore, the gilded chief and his companions stepped. upon a balsa and proceeded upon it to the

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middle of the lake. There the chief plunged into the water and washed off his metallic covering, while the assembled company, with shouts and the sound of instruments, threw in the gold and the jewels they had brought with them."

Treasures have been found in this lake, among others a group of golden figures. The chronicler Don Rafael Zerda says: "Undoubtedly this piece represents the . . . cacique of Guatavitá surrounded by Indian priests on the raft, which was taken on the day of the ceremony to the middle of the lake" for sacrifice to its goddess.

"Humboldt saw the staircase down which the gilded man and his train in jaguars' skins descended to the waters of the lake of Guatavitá. He also found the remains of the tunnels by which the Spaniards had tried to drain the lake."

A joint stock company in 1903 did drain the lake of Guatavitá. But its mud turned to cement before they could dig in it.

The "vision of the Dorado appeared like a mirage, enticing, deceiving, leading men to destruction." It became the name of a mythical

country, where rivers ran over sands of gold, and palaces stood on golden pillars shining with emeralds. Infamous adventurers, brave as the knights of the Round Table, confronted and stormed the great jungle.

Orellana and Gonzalo Pizarro tried to find the glittering capital of Manoa, which El Dorado had gradually become. For these buccaneers who set out with an arrogant army to conquer the Cinnamon Country, nature became the supreme fact of existence. Famine, perpetual rain, fevers, strange insects, and reptiles attacked them. Their expeditions could but end in the murder of each other. They followed the example of all life in the jungle.

Doctor Middendorf says that the Amazon was named for the Coniapuyara, a race of big women leaders, whom the Spaniards found. Condamine assures us that light-skinned Amazons lived there. Raleigh, while searching for Manoa, is said to have first reported them, though he found them by going up the Orinoco. The distinguished scientist Ulloa, who went to South America in 1758, says it is "an undoubted truth that there had been formerly

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several communities of women who formed a kind of republic, without admitting any men into the government." Well, at least there is nothing either to prove or disprove it. A recent report of the Geographical Society of Lima gives a far less picturesque explanation of the naming of the Amazon, to the effect that "the tribe of the Nahumedes were thought to be Amazons on account of their long hair and the *cushma*, a long, sleeveless garment which they wore."

Close upon the adventurers came the Jesuit missionaries, who burned to save from hell-fire the strange human beings they might find lurking in the forest depths. One Jesuit father, Fritz, spent fifty years (1680-1730) on the Amazon, trying to connect the aborigines by the introduction of a common language. These missionaries left no ruins like those in Paraguay, the Jesuit State, but their teachings are visible in savage traditions. They transformed Bible stories to fit jungle needs.

"A Murato was fishing in a lake of Pastasa, when a little lizard swallowed his hook. The fisherman killed it, the mother of the lizards was much angered and with her tail slashed the

water in such a way that it overflowed the entire vicinity. All were drowned except one, who climbed into a small pivai palm, and hung there several days under a perpetual darkness. From time to time a fruit of the pivai palm fell, but always upon the water, until one day he heard the plump of the fruit upon dry ground. He got down from the tree, made a house and farm, and with a little piece of his flesh, which he planted in the earth, made for himself a wife, by whom he had many children."

The commercial age is now having its fling. It is attempting to subdue the jungle. The rubber hunters are not seeking paradise. They are not looking for legendary kingdoms, nor are they wishing to save the souls of beings of whose existence they are not even persuaded. Rubber is a valuable product. So are other things concealed in jungle depths. Dark crimes can also be hidden in the half-light, covered close under the thick veil which shrouds the land of mystery.

This Peru, approachable from the Atlantic, the "monstrous thicke wood" of the early travelers, still remains undisturbed. Illimitable

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one unbroken forest to the faint blue horizon, without a single natural approach except the waterways. Lying close below the austere mountain-tops is a luxuriant world of vegetation; wide stretches of unpreëmpted soil, sparseness characteristic of polar regions hangs just above a tropical phantasmagoria of growth. Shifting cloud-shadows and wandering rainbows flit and interchange over the jungle like the play of colors on a peacock's neck.

Though we know that there are no mighty civilizations of human making, there are no streets of gold with ruby walls, yet within the imperturbable recesses are strange races and wonders of plant and animal life which may interpret whole domains of knowledge. Nature's secrets are still locked up in this prolific laboratory. Though we know that no great race of kings holds sway, yet it is certain that here is a chance to study in the wild tribes the growth of human language—beginning with the poor Inje-inje, who has not more than a bird's speech, and whose needs are no greater than his speech would suggest.

CHAPTER II

TOWARD THE UNDISCOVERED COUNTRY

From the mountain-tops the stream leads toward the east over the Evebrows of the Jungle, La Ceja de la Montaña, letting loose a deluge from its black clouds. Caught between walls of red and black striped rock, the valley grows deeper and hotter and filled with mist. The water accumulates brightly colored pebbles. It rolls over ungathered bits of gold in its sand and rushes them along with slivers of glistening mica. All about is the sound of springs "whose waters moss has turned aside." Buried in luxuriant vegetation, it slides on beneath thickets of guava, golden cassia, and red-leaved tilandsia bushes, hung with rank passion vines, whose ripened fruit, the crackly granadilla, lies everywhere upon the ground. A mammoth iguana, munching the flesh-colored bignonias, falls occasionally from the tree-tops.

Small, richly plumed parrots nest in the rock [240]

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walls. A whole book might be written about the parrots, various as vegetation itself, flashing multi-colored light as they scream through the air-spaces. There is the toucan, turning his bill with its accessory head around to gloss his splendid plumage in a ray of sunlight. At the other end of the scale are the meek little green parroquets with perpendicular bills, hardly larger than sparrows, which go in pairs and move in parallel lines. Every variety keeps together, each to its kind.

There are other large, fruit-eating birds; birds with curiously shaped tail feathers; birds with crests and ornamental plumage. As variegated as their forms are their curious cries. The black ox-bird bellows like a bull, the black and red tunqui grunts like a pig, and wood-pigeons cry like children. Occasionally "jets of brilliant melody" sparkle among the trees, but more often the notes have a mysterious, aerial quality "like the tinkling of a far-off bell suspended in the air."

Here hangs the wonderful nest, four feet long, of the pouched starling, bound together with spiders' webs as strong as silk. Such is jungle

lavishness that plants and animals are given endowments useless to them in their struggle for existence. The bird which builds such a palatial nest has no advantage over any other. Its wondrous, unplantlike power gives to the sensitive plant no superiority. Struck with paralysis, it can recoil at a touch, but that forms no link with its fellow plants. Such a feat is not an attribute nor in any way a necessity of vegetable life. It can hardly compensate the sensitive plant for its lack of perfume and bright flower, the right of every growing thing.

Chatter of monkeys mingles with roar of falling water, hairy manikins, shrieking and gamboling, "very gentle and delightful apes," Father Acosta called them. Tiny, blear-eyed monkeys scream in disapproval of all they can see, hear, or smell. Scarlet-faced monkeys, owlfaced monkeys, swing from branch to branch with crazy gestures, "taking one turn of the tail at least around anything in passing, just provisionally."

Thick masses of *quinar* trees are draped in luxuriant parasites, and *agave* bushes are filled with red flowers. The wonderful *maguey* grows



IN THE VALLEY OF THE PERENÉ.



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here, yielding water, oil, and vinegar, honey, thread, needles, and soap. Its juice boiled in rain-water takes away weariness.

Clear water drips over blocks of granite, covering the stone with moss in falling. The terrible jaguar lies curled up asleep in some far-off notch, gently purring. Ferns and palms, forerunners of the great empire of vegetation below. cluster along the brooks swelled with snow. "Tall and whispering crowds of tree ferns" droop their filmy fronds from lofty, slender stems. Ferns of every conceivable size and texture smother rocks and decaying trees. Some are as small as mosses, others appear monstrous, like those of a moonlight night. Hummingbirds flit above the pomegranates or lose themselves in a banana blossom. "The rose-colored plumage of the silky cuckoo peeps out like a flower from the thick foliage."

It is an earthly paradise, where bloodsucking bats emerge at night and lightning rages uncontrolled, destroying trees and cracking open precipices. Pumas live in these clefts hewn through the mountains, and they spring on to the shoulders of a victim, drawing back the

head until the neck snaps. *Pumayacu* is the stream of the puma, with its tumultuous torrent whose very stones are treacherous.

Such are the rain-soaked slopes of the Andes, a tangled mass of jungle. The woods are all enchanted. Thousands of fairies dance in the sunbeams, and during the rain myriads of them hide in the flowers. If disturbed, they disappear underground. One can never be sure that "what one surveys is what it purports to be, nor even, that in surveying nothing, one is not gazing through an invisible being," as Guenelette observed so long ago.

The half-Indian guide began to speak, taking a coca-leaf from his fawn-skin pouch.

"Pigmies live in the undergrowth. They are not more than so tall, . . . and very, very wild. No, they're not monkeys. They have a language, although we cannot understand it. How do I know they live here? Why! I know! Have I ever seen them? No. But — I've seen their shadows.

"And then there are jaguars near here, jaguars with the hoofs of bullocks. At night I can hear them springing upon the thatch of my thin

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roof. They roar and roar and one might call them the devil himself if one did not know that they were jaguars with the feet of bullocks. Have I ever seen them? . . . No, but then—I've seen the prints of their hoofs.

"Here in the bottom of the river, lying full length, lives the great Mother of Waters. She is so long that she could stretch from bank to bank and lie sleeping on either side at the same time. That is why she lies lengthwise in the river bed. Sometimes there is an awful, rumbling noise, like an approaching earthquake. Then the waters of the river are churned like the smallest mountain torrent tumbling over a rock in mid-stream. The great snake lifts her head, then her heavy body from the stream bed, and crashes off through the jungle. The track she leaves behind her is a desert waste; no growing thing is left, and the wake is as broad, why, as broad as this stream, under which she is now lying," and he pointed with wide eyes to the water, rushing headlong to join the Amazon.

All the snakes of that particular locality did miracles, so I was told by a wise man who could himself turn men into beasts at will.

"This river," the guide concluded, "used to flow up on one side and down on the other, until white men sailed upon it. Then one half turned about, and the river now flows in but one direction, as you can see."

As the gloomy, bottomless ravines descend, the forest becomes more dense, with murmurs of flowing water everywhere. Mists hang from above, barely concealing the jagged, black peaks. Sheets of continuous foam veil the side of a polished cliff. Water drips over every precipice. Cascades tumble from one mossed basin to another or let fall a clear column into a rock-pool deeply buried in tropical vegetation.

Finally mountains and ravines subside, and with the energy of one final, mighty leap, the rushing water plunges into the heart of the jungle, comes to rest, then glides out with the flush of a flood-tide across the Land of Water.

"As the serpents of this basin exceed all other serpents in size, so does the Amazon exceed all other rivers." As the whirl of branches is to the trunk of a tree, as everything in nature is tributary to something else, so are streamlets

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in the mountains of the snowy desert to this mighty river. Collecting itself upon the frozen puna far up among the clouds, it gets an impetus which makes fresh, wide stretches of ocean thousands of miles away.

So vast is the Amazon that, like the Andes which form a barrier to separate two worlds, different species of animals inhabit its opposite banks. It swarms with fish that will fight for a right to live, and some of them, the paichi, for instance, reach the length of ten feet and must be caught by harpooning. The water is full of swimming animals. There are river-cows like sea-lions, and oceanic fauna such as frigate birds and flying-fish. In the mud along the banks are tracks of crocodiles and tortoises.

The Amazon has gained mastery over the land and has turned it into a sposhy ocean, interspersed with flats of jungle flowers. A watery labyrinth, "an aquatic not a terrestrial basin," it is the Mediterranean of South America. The greatest river in the world twists and turns about, makes short cuts across its own bends and leaves behind a delicious lagoon here, or a little, land-locked inlet there. The

Victoria Regia spreads its great, leathery leaves, and scarlet ibises tilt about upon them.

This land beyond the Andes is known as the "rain-shadow." The already overflowing rivers are constantly swelling, since it rains so violently that a stream of the Amazon valley can rise fifteen feet in a single night. A passing and re-passing is continually going on, for, as the water flows back toward the ocean, the winds above it are returning from the Atlantic, bringing rain to moisten the jungle and to be stopped only by the wall of the Andes.

Rain discloses the resources of the jungle. Plants push, burst upward in astonishing growth. Flowers paint themselves with ineffable new colors distilled from the rain, and those whose day has come and gone lie in heaps of yellow, pink, and white petals on the ground, fallen from beyond the tree-tops.

A single, heavy tapir, anta, the somber-colored wood-cow, roused by the rain and encouraged by the added gloom, wanders forth to tear off new sprouts within its reach. Peccaries rustle by in little droves — wild pigs which, it is said, will bite around a tree if their

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object of attack has climbed beyond reach. The minute, silky marmoset, filled with perennial terror and shivering at the rain, has crept into shelter, and just daring to show its wrinkled little face, howls dismally.

It is after a rain, too, when the wondrous notes of the *organista*, the sweet flute-bird, drip through the trees, mellow, melancholy, yet with a musical accuracy of pitch as clear-cut as the circle of a drop of water fallen on a slab of alabaster. These notes share the mystery of the vast silence itself. Even savages rest on their paddles to listen. Would you capture the magician and carry the jungle-silence home? You can take the little gray bird — but it always dies in captivity.

CHAPTER III

JUNGLE GLOOM AND JUNGLE SHEEN

Ι

SINCE the earth was first moistened by rain, and plants first grew, no limit has been set to the rights of vegetation in the jungle. Its sway is uncontested. It has known no master. Its insatiable desire to reach up and out and down has been uncurbed and undirected. And heaven seems to wish it well. Intensest heat, light, and moisture are showered upon it. Under such conditions, life would spring spontaneously into being, were there not myriads of progenitors to be responsible for whatever form it chose to take.

All the creative force of nature is behind the infinitely varying forms, and the frightful luxuriance of reproduction. Vegetation has the extravagance of first geologic ages, bursting with

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life, rejoicing in weird, vegetable arabesques and green out-thrusts of leaves.

Amazing trees yield coloring matter of yellow, red, and blue. Trees cure bites of snakes, the malignant manzanillo infects any one who sleeps beneath it. Then there is the cow-tree of milky sap, the red-wooded blood tree, and those furnishing food for curious animals, which transform it into curious shapes. Beneath the ironwood, whose sharp edges are hard as steel, crawls the sensitive plant. There are whole forests of cinchona, whose beautiful flowers are forgotten because of the value of the bark. The dead man's tree grows here, whose stems are sucked by witch-doctors to produce a trance; also the wonderful tree of rain, which Boussingault referred to when he said: "By the light of the moon we could distinctly see drops of water dripping from the branches." The drier the night the more water it condenses, letting it fall upon the ground beneath. Ponderous leafage overarches great trunks, columns of a giant's castle, each with its peculiar color. While some are smooth, others are deeply fissured or armed with long spikes. Most of the tree-trunks are

indistinguishable for the mass of vines "sculptured" upon them. They cleave to the smooth bark, darting out roots as they ascend. "The green eaves of foliage seem supported by pillars of leaves."

Tapering ribbons sway to and fro, tangling themselves in the long moss-beards. "Green, fleshy chains" festoon themselves upon the branches, and hang heavily on slender stems. They stretch taut from one tree to another, or rigid, fasten tree-tops to the ground. The whole jungle is knit together. If a supporting tree falls, the confused masses of *lianas* adhering to it snatch at whatever is nearest for a fresh start. They twist about each other tighter and tighter, gaining always a firmer and firmer hold as they ascend. Far up above, they will weave back and forth a close fabric, spreading out wide roofs of flowers.

Indistinguishable tree from creeper, parasite from supporter, all are clamoring for space and light and air. Those which have struggled through to the top reach toward the scalding sun or alternate cooling deluge, riotous, irrepressible in vigor, radiant with color, distilling

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intense perfume, drooping with the succulence of their own leaves and stems, breaking with the weight of their over-developed fruit.

Vegetation invades everything. It even shoots out over the water, covering it with lovely forms. Hardly a growing thing can get its impulse directly from the soil. That was long ago preëmpted. There must be other things to grow upon or in. Wherever there is a suspicion of foothold, a new form of life springs up spontaneously, gleaning nourishment from whatever it touches, exuberantly prolific from the start, parasites one and all, living at the expense of some earlier comer.

Even parasites have their own parasitic growth. Parasites flourish as trees self-grafted upon trees. Draperies and tapestries and motionless cascades, this inundation of parasitic life falls back again to the ground in great growing clumps. What indeed is a parasite?

Little rifts of color have collected here and there, concentrated deep in the nooks and crevices of trees, moulded into orchid form. Some are tiny as mosses and grow upon the ground,

dewy - looking, little violet - colored flowers. Some lie upon the water, some droop over the edge of precipices, their great mass of fleshy, aerial roots sucking damp nourishment from the air. Certain trees seem destined by nature as orchid gardens. Numberless varieties, each with its peculiar bearing, perch upon the limbs, night-scented blossoms with a spongy texture fringed and fluted in a thousand ways; beautiful monsters of crimson and black, whose queer little phantom faces, with beards of fine hairs, make mouths at you. Hot and moist, the imperceptible odor of each mingles with the mass of other imperceptible odors, oppressive at last by sheer force of numbers.

The habits of orchids, if so they may be called, are amazing; for example: their attraction of insects and means of scattering their pollen about on a moth's body; their bright color luring day-flyers and their strong odor night-flyers to the same flower; the elastic flaps, a resource of others for a similar end. As Darwin said: "With parts capable of movement and other parts endowed with something so like, though no doubt really different from sen-

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sibility, they seem to us in our ignorance as if modeled by the wildest caprice."

Whimsical and wayward, restrained by no precedent, an orchid dares defiance in all the properties it possesses, odor, form, and color, so that the line of its descent is sometimes impossible to distinguish. This anarchist of flowers throws out an unexpected leaf or petal wherever it chooses, and if interfered with, refuses even to produce its own blossoms, veering off in independence. The most elegant flower that grows, able to conventionalize even nature herself by lusciously designed leaves — patterns whose suitable background would be courts of kings — riots here alone in "languid magnificence," merely glanced at by a passing humming-bird.

If a tree or a vine has a little less succulence than its neighbor or a little less vital impulse, nature calmly watches it pounced upon and extinguished. No one "compassionately tries to save the unfit from the consequences of their unfitness." Having endowed this prolific land, the lavish elements can withdraw and survey unmoved the scattering showers of seeds, that

prodigal industry of plants in busily perfecting seeds which will never be given an opportunity to grow. So little chance has a seed that new attempts at life are more secure if supplied by the energy of the parent stem. The elements are not responsible for the death-struggle of vegetation which results. As far as they are concerned, each seed that falls and each little shoot that springs upward would be given an equal chance. But every form being equally favored, its neighbors contest its right to live. Coöperation to make life possible at all, only begins when united force is needed to conquer a common foe. Life here is for viper and vampire as well as for butterfly, and the parasite has an equal chance with the benevolent vine. It is a battlefield where militant nature fights in civil warfare through the ages. Plants once given birth demand the right to make the most of their own particular form of life, fighting for sun, fighting for air, fighting for the right to live. Ironically enough, warfare is fiercest between forms most closely allied. "They interlace, strangle, and devour each other." Parasitic alliances are possible only between very diver-

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gent forms, each benefiting by the use of what the other does not need. Parasites are leapt upon by other parasites; there is strife even among them. Forever fighting with each other, they all suffer equally from hereditary enemies descending from above or creeping up from below, capturing by attack or poisoning by stealth.

Plants not only crowd their neighbors out of the soil, they seem to dispute the air as well. Each begrudges the other a breathing space. The ingenuity of nature is taxed to invent compensations to each for lack of what it has a right to expect as its due. An impenetrable disguise of buttresses is substituted for roots and want of underground space. Air-roots drop from branches. Smaller trees, adapted to the dimness, live in the shade of larger ones. Nature uses every subterfuge, restrained by nothing known as customary. Plants maintain a life whose pertinacity we have no scale for measuring. Each asserts its own individuality and insists upon it with inexhaustible energy. Each is convinced of its own desirability, convinced it was intended to live, proclaiming that intention to the death of its neighbor.

Out of the remains of the dead arises a new generation with an increase of vital impulse. The instant a plant has reached a sense of completeness, it is sprung upon, twitched from decay into the vitality of some lovely form whose time has come. Whatever lapses into the past is at once metamorphosed. Whatever should look forward for opportunity would be snuffed out by some exuberant growth determined on immediate perfection.

There can be no seasons in the jungle, no general periods of growth, maturity, or rest. All stages of development are flaunting from independent plants in a single locality. Each is appropriating whatever it can use in the elements or in its neighbor to weave into its own perfecting tissue. Each is as little influenced by the other as are two trees rubbing against each other with the wind, mingling their branches and blending their foliage. Though forced during a lifetime to closest proximity, they are members of remote families, and the nature of neither is modified in the slightest degree.

Indeed, all seasons concentrate on a single tree; for some of the massive fruits require

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more than a year to ripen, so that fruit is maturing and flowers are budding on the same tree.

Only heat can penetrate. Light is almost excluded by the unbroken canopy of interlaced branches. It is left up above, absorbed into whirls of vivid flower or expanding the luscious leaves. Heat and moisture are imprisoned. Plants flourish in "the boundless, deep immensity of shade." Left in wan half-light they push up into the "green gloaming," adapted to the dimness yet straining upward to the light which would kill them if they could reach it. Even bats sometimes make mistakes and emerge at noonday, unhooking themselves from branches on which the sun has never shone. All forms are confused, and the strange shapes but half-seen are concealed by others no less vague.

Deep within the wilderness, more silent than the noiseless solitude itself, lies a mysterious lagoon sacred to the giant Mother of Waters. All about, coiled in the half-putrescent, vegetable mould, are myriads of venomous creatures, gliding, writhing, crawling in and out. Minute snakes, whose bite is death, curl in tendrils or lie like coral necklaces upon the leaves. Larger

ones drape in vinelike garlands overhead, to be distinguished from a blossoming festoon only by a sudden, loose-swinging end.

But the pool! What wet blackness and horrid mystery! The surface of the water is never ruffled by a breeze. It has no moods. Unperturbed in perpetual gloom it lies in quivering stagnation, oozing nauseous odors under the twilight of a full, tropical noon. No roseate spoonbill, no delicate white heron tilts about upon its banks. The black, stagnant water can barely cover the solid, seething mass of "hairy, scaly, spiny, blear-eyed, bulbous, shapeless monsters, without name . . . wallowing, interwriggling, and devouring each other."

Here sleeps the Mother of Waters, congenially imbedded, her shining coils slipping about over each other — the great yacumama — the mighty boa-constrictor, who can swallow almost any creature whole, and whose breath withers any beast lured within reach by her fascinating poison. Humanely she intoxicates before squeezing the unyielding bones to pulp of digestible consistency.

Sometimes she unfolds her darkly iridescent [260]

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coils out into the hospitable closeness of the jungle. Laboriously she winds upward in overarching trees; but, as if too languid, leaves part of her frightful weight dragging below. She looks moss-grown, like the stem of an old tree, and treelike, remains motionless for days at a time. When she does wander forth in search of prey, a track follows through the lush, yielding vegetation — her huge weight lingering heavily upon succulent stems.

п

The atmosphere is full of color — weird, miasmic exhalations. Next to the shade lingering under the dark velvet foliage on the edges of streams, the glossy leaves toss off sheets of silver light or reflect a "russet glamour" from their under sides. Beds of yellow butterflies settle along river banks and concentrate the sunlight with blinding intensity. Every leaf seems to blaze like a gem; even the black shadows pulsate with inner light. It is part of jungle mystery that even the light comes in iridescence.

Legions of beautifully colored spiders silently spin their geometric webs. Insects all dipped in silver, with waving antennae laid back along their heads, red beetles with golden heads and wings of chintz, buzz to and fro. Moss-grown leaf-insects — ossified, living scarabs — walk about on tree-trunks. Stinging bees and wasps fill chinks of jungle trees with wild honey. Myriads of ants swarm: driver ants; parasol ants carrying a bit of leaf about over their heads; fever-bearing ants, and ants that live in the hollow, white stems of the cecropia tree and furnish the sloth's food. Centipedes hurry by, legs moving with "invisible rapidity like a vibration," and numerous flies, ticks, mosquitoes, cicadas, dragon-flies. Some of these strange beings need two or three years of larval life to prepare for a flight of a single hour, possibly after sunset. What a limited idea of the world must they have who never see the light of day!

We are assured that the unseen world is a very substantial place; so is the microscopic. And an ear-trumpet reveals a new universe of sound. What a region of ultra-violet murmur-

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ings must lie beyond that we never catch at all! If only an elemental apperception can grasp the vastness of the jungle, what can be said of the delicacy of its silver-point drawing? For here is greatness on the invisible scale, "a creation at the same time immense and imperceptible."

Side by side with sloths, ant-eaters, and armadillos, dwarf descendants of mastodon days, still lumbering about undeveloped in spite of their ancient lineage, humming-birds have flashed through the ages. They have profited by cycles of centuries to elaborate their little bodies beyond imagination with pendent beards, crests, waving ear-tufts, and ornaments colored in fantastic manner. Their tails, fashioned in queer shapes, always consist of ten feathers. Even the tiny, sharp feet, minute as they are, differ greatly in form and are sometimes covered with a delicate, white down. There are feathers on a humming-bird's eyelids. The little saw-edged tongues for extracting insects from flower-honey all differ. Their bills are as long as their bodies, and their tails are twice as long.

What can be said of their color, brighter than any other in nature? The hue of every precious stone, the luster of every metal sparkles from some part of the diminutive body. Often only a twinkling of emerald-gold-green or ruby-colored light reveals their passing —

"A route of evanescence with a revolving wheel!"

Sometimes the flash comes from throat or back or brow of iridescence, sometimes from a body sheathed in little gold scales; sometimes from the very tips of long white feathers frilling the neck about. The colors come and go, shift and change with every motion, "embers flung about by invisible hands." The wing feathers are gray. No eye could discern anything but a dusky film, so a bright display would be lost!

And all this is within a thimble's compass, for the smallest of all humming-birds grows in Peru. It is hardly larger than a bumblebee, and the giant of the race measures less than a swallow. Doctor Brehm says the Dwarf Humming-bird is the only one that has a song.

There is as much diversity in the names of the humming-bird as in everything else pertain-[264]

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ing to it: Tresses-of-the-day-star, Rays-of-thesun, Sun-gems, Sun-stars, Flame-bearers, Froufrou, Pecker-of-flowers, Flower-sipper, Honeysucker, Sipper-of-roses, Fly-bird, and the sweet Colibri. It has, besides, many local names, as Tominejo, *tomin* being the smallest weight.

Birds migrate south from the tropics as well as north. The humming-bird whirls through the jungle and luxuriant valleys of the Andes, out to islands in the Pacific, and follows the fuchsia down to the very boundaries of barrenness in the tail of South America. A mere dab of brain can engineer this infinitesimal motor from Patagonia to Canada. One minute Flamebearer lives only inside the crater of an extinct volcano in Veragua, marked with red like the fire-stealer wren of Brittany, and many battle with storms of the high Andes and can be seen mingling their vivid flashes with snow. They who live by means of flowers! One called Sappho, a blend of red and green, lives upon the bleak heights of Bolivia, frequenting the haunts of the condor.

It has been thought that the humming-bird has no wish-bone, its frame being more compact [265]

than such construction would allow, in order to withstand the immense strain of its wings—immense, yes, measured by millimeters. At any rate the largest organ is the breast muscle, and the heart is three times as large as the stomach. Its senses are alert, and a well developed skull could prove the excellence of the brain beneath did not its habits do so.

The humming-bird always trusts itself to the air for however brief a distance, and flings its supple body about from one flower to another in vibrating flight. Now it hovers near without disordering a petal, now it hangs from tall grasses by the tip of its thornlike bill, a sparkling of wings with spurts of precious stones in a setting of petals, lost in another instant in wide air.

Never smutted by earth, because never touching it, the humming-bird juggles among the flowers. It never follows all the flowers of a single bush nor even exhausts all the sweetness of a single flower—"a dart, a glance, a sip, and away;" butterflies, a symbol of caprice, are not more fickle. This utterly erratic creature performing its aerial gambols holds within itself the

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reason for its being unmolested by any enemy
— the chase not being worth the morsel!

Ineffable is the whole field of its labor. The coarsest materials of its nests are the finest straws it can pick up. Inside they are lined with down and spiders' webs. Consistently they are attached to a pendent branch or long-swinging vine. Thither the humming-bird flies to supply a family's microscopic wants.

To a giant looking through a microscope, what a revelation of the infinite industry of nature in worlds beyond the grasp of any sense of his, the humming-bird would be!

CHAPTER IV

ANIMALS OF DARKNESS AND LIGHT

Ι

What a land of silence! The vast forest seems wholly uninhabited save for the chatter of a passing train of harlequin parrots or angry apes. And yet it is not silence. There is the great movement of lapsing and becoming perpetually going on; both composition and decomposition rustling on toward completion. They are mere phases of that "illimitable sun force which destroys as swiftly as it generates and generates again as swiftly as it destroys."

"So fast do the flowers expand that an actual heat, which may be tested by the thermometer, is given off during fructification." The tepid water forces all growing things to prodigious size. Exuberance seems to have no boundaries. The length of the young shoots is only less amazing than their growth in a single day.

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Leaves expand until they are twenty feet long, and ferns tangle their own fronds in haste to push out to the utmost limit of their nature. One sees things growing in the damp heat as one hears a yucca palm grow.

But where growth is on a stupendous scale, there decay is exuberant, for "the powers that build are the powers that putrefy." Above are light, warmth, and moisture: such are conditions of growth. Below are darkness, warmth, and moisture: such are conditions of decay. Which is more effectual, that mighty power of evolution elaborating "the rain-water hurrying aloft" into tissue of leaf and flower, or those great forces of dissolution which can so soon transmute the fallen trunk of iron-wood into a pregnant, humid mound? It merely lapses into those elements composing it, and is instantly absorbed by fresh leaves culminating to-night.

The noble heat blends the smell of laboring sap and that of aromatic mosses with the pungent odor of decay, the damp smell of death with those sweet poisons which drip off the trees and envelop like a caress. The incense tree was described by Martin Fernandez de

Enciza in the early sixteenth century. "Incense doth hang at its boughs," he said, "as the ice doth at the tiles of a house in the winter season." Over-ripe fruit drops smashing on the ground with scent of strawberries. A musky humming-bird leaves behind a thin trail of heady perfume. The air is filled with vegetable breath, weird, far-off blossoms, mere ghosts of fragrance mingling in a wave of sweetness. Smell is indeed man's most emotional sense. It gives a poignancy to a remembered scene which no detailed picture can, and sharpens the whole sight perception. An entire chapter should be written about jungle-perfume.

The silence of day is succeeded by the "soundless tune" that fills the night. It surges up from below and shuts down from above. Pervasive as the murmuring of water, it spreads out through the night, pierced by a sudden brilliant squeak near at hand. With darkness settles a humming, booming, drumming, croaking, deafening uproar from thousands of diversified insect throats filling up every chink of space, each one crowding out the other. Insects here are not a miniature, far-off chorus, one ingre-

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dient of a summer night, but overwhelming, terrifying, absorbing the dark atmosphere.

Mysterious animals live in the depths of the ocean where no ray of light has ever pierced. They light the way for their own fishing, as the glow-worm is struck by its own brightness before seeing any other. Fire-beetles and phosphorescent caterpillars and flickering fireflies — little stitches of a shining thread in the soft, verdured blackness of the tepid night — make the primeval forest discernible.

The true life of the jungle begins with darkness and ends with light. As if the habitual gloom were not deep enough, jungle animals wait until night has enclosed them further to carry on their life activities, those weird creatures which lurk in the shade, primeval instincts always alert, living on suffrance in this land of vegetation. They have persisted since early geologic ages, the only remnants of their kind, haunting the nights from then until now. Dwarfs of a former age, growing constantly smaller and fewer and less important, they will dwindle through coming ages until zoōlogical gardens can no longer be supplied, and their

toothless skulls in glass cases will be the only evidence that they ever existed.

The antediluvian ant-eater hunches along on his stiff, curved claws, stopping now and then to rake out a crowded ant-hill, whose compact, crawling interior he cleans out with an efficient slash of his spiral tongue.

The giant armadillo, the glyptodon of former ages, developed a complete coat-of-mail by which his small descendant is still protected. He can open and shut the scales at will, hiding himself inside them. He trundles to and fro, burrowing out well-flavored roots. His voice is dull, without ring or expression. But his little shell is used as the bowl of a curious, three-stringed guitar from which natives can coax sweet sounds.

The tapir is another twilight animal, protected by his enormously thick hide. He snuffs about with his long snout, follows paths made by himself to the water, and sounds his queer whistle as alarm.

The cavernous croak of the violet-colored throat-bladder matches the twilight. The goatsucker, with softly flapping wings, rises to greet the night, and from deep within the forest re-

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sounds the drawling cry of the sloth. His small, ghoulish face peers into the oncoming darkness.

Night settles. Bloodthirsty bats emerge, bright eyes flashing eagerly. Leaf-nosed vampires, whose empire is gloom, are prepared for their nightly bacchanale.

When utter blackness has obliterated the jungle, the *carbunculo* slinks slowly out of the thickets. "If followed, he opens a flap in his forehead from under which an extraordinary brilliant and dazzling light issues, proceeding from a precious stone; any foolhardy person who ventures to grasp at it is blinded, the flap is let down under the long black hair and the animal disappears into darkness. The Incas believed in him. The viceroys in their official instructions to the missionaries, placed the *carbunculo* in the first order of desiderata."

II

"The velvet nap which on his wings doth lie,
The silken down with which his back is dight,
His broad, outstretched horns, his hairy thighs,
His glorious colors, and his glistening eyes!"

Spenser, Muiopotmos

With great broad strokes the tropical butterfly descends at sunset time to the jungle pool. The soft color of its wings is hardly distinguishable from the mold. It sips the water quietly.

A small bird, ready for a feast, swoops down with a whir of wings . . . but where is the butterfly? In its place is a fierce owl, bulging eyes flashing, and every feather on his head bristling in eagerness for his prey. The little bird of supper-intentions has precipitately departed, never to return, a permanent lesson learned in the terror of an instant; yet it was learned from the under side of a butterfly.

Who so much as a butterfly is a child of the sun? Evoked by his warmth, it comes forth with all faculties developed for the fullest enjoyment of a new life, in which it seeks out the sun-spaces in the damp forest. What a direct response to warmth in the up and down motion of a butterfly's wings, wide-spread on a sunny mass of leaves! How quickly it folds its lustrous wings and sinks, drooping, upon a flower when the sun goes in, as rainbows disappear at the sun's withdrawal!

Nor does its sun-worship end here; for Iris, [274]

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symbol of the sun, is imprisoned upon its wings. Those magic wings! Nature writes upon them all the changes which the organism undergoes, the patterns of the minute feathers, the direction of the fine veins, their shapes, their pencillings varying with the slightest external change. Each can be distinguished from all the rest by what is written on these evanescent tablets, the most delicate on which laws have ever been inscribed.

The Peruvian butterflies have a world-wide reputation, from the triple-tailed theclas making up in elegance of form for their diminutive size, to the azure morphos, those noble insects as large as two hands laid side by side, the desideratum of collectors who press their burnished wings between glass walls. Abnormal tails reach in abnormal directions like ingrowing horns, sharply pointed and oddly curved. An imp-like dot of silver near by calls attention to them. Bold, uneven blotches of gold and black are surrounded by demure, parallel lines. A spot of crimson pulsates in the midst of a whole wing of iridescence. The extravagant creature carries his black velvet body about on yellow

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legs. Some are as finely mottled as partridge feathers. In others the design just glimmers through mother-of-pearl. Some are transparent in color, a stained glass window leaded in design with living veins. The spaces between veins, however small, are exquisitely fashioned, and always the corresponding patterns of the two sides are perfectly aligned. Some are transparent like dragon-flies' wings. Some are almost veinless, visible only by a dip of color on the tip of the wing — phantom butterflies. From others, apparently colorless, certain lights can flash the segment of a rainbow.

What fine fitness in a French expression for the blues — papillons noirs!

Many of the most brilliant butterflies are so colored because they are unpalatable, even uneatable, flaunting their warnings in the face of the lizard, which might eat them unawares were they not so conspicuous. They can flutter lazily about, with no attempt at concealment, preserved by their own poison. In making the injurious butterfly resplendent, nature saves both the butterfly and the bird which might have gulped it down.

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Others are preserved by having adopted bark-designs or leaf-color or twig-shapes. Some even float about mimicking each other, if advantageous to do so. Some gain protection by imitating the brilliantly colored but uneatable butterflies for which they are mistaken. Mimicry or warning, each protects as is most beneficial, by concealing or making conspicuous. Seen and recognized, they are not molested; or, hidden, they escape notice.

How varied are their habits! Poisonous ones fly slowly. Others merely frisk about, toying with life, air, and sunlight; skirt-dancers they are called (megaluras), "sown and carried away again by the light air." Some heavy-bodied butterflies gain protection by flight so rapid as to make them mistaken for humming-birds. The broad, strong strokes of the wide-winged morphos float them across wide rivers. The flight of butterflies is a biologist's problem, as well as their colored juices and seasonal forms.

Some, flying low, have their greatest brilliancy on the under side of the wings; others, flying high, are dull underneath to protect them from enemies below, as the bell-bird, whose home is

in the dazzling sunshine above the tree-tops, is made invisible to any eyes looking upward by its snow-white plumage and transparent wings.

"Crepuscular" butterflies emerge at sunset. Such are the caligos, amazing creatures equipped on the under side with an owl's head, which can terrify their pursuers by merely turning wrong side out. All animals are suspicious of a strange-looking eye; and at dusk, when the butterfly descends to the jungle pool to drink, the owleyes are particularly effective. The harmless butterfly spreads the one view of itself to the enemy which could save its life, and continues slowly to sip the dark water.

Some butterflies stop in the gloomiest shades of the forest in darkness of noon. They all love the damp, and quantities of them surround puddles. Some settle with wings erect, some expand them and rest head downward, pressed closely against the supporting surface. The "swallow-tails" never allow their long tails to touch anything. Some alight upon the end of a stick, others rest upon dead leaves, others upon rocks or sand, some on the under surface of leaves, entirely disappearing when they alight.

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While some are protected for motion, others are protected for rest. Flickering noiselessly into the deep, wet shade in the network of vines and succulent leaves, they flash out into the clear sunlight. The glow of colors pulsates on their shining blue wings, intense as the fathomless blaze of a fragment of copper-saturated driftwood. Creatures of the sky they are, indeed, touched with the celestial hue. It was not without reason that the Greeks gave the same name to this wondrous insect and to the soul.

CHAPTER V

THE JUNGLE IN PARADOX

"There is a strange beast, the which for his great heavinesse, and slownesse in moving, they call *Perico-ligero*, or the little-light-dogge; hee hath three nailes to every hand, and mooves both hand and feete as it were by compasse, and very heavily; it is in face like to a monkie, and hath a shrill crie; it climeth trees, and eates ants."

FATHER ACOSTA

The uncouth sloth! Can any greater emblem of misery be conceived? He hangs upside down upon a branch like a bundle of rags on a nail. His hair is like dried grass, stiff, with a greenish tinge, and, as might be expected, goes the wrong way. His long arms are jointless, swinging to and fro like the end of a rope. He can turn his head all about, till his round, simple face meets the wind; then he opens his toothless mouth to take it in, giving rise to a tradition that he lives on air. His want of teeth is supplied by long nails — his only means of attack — with which he scrapes out ants. Whether



A SLOTH, FROM THE HISTORIAE RERUM NATURALIUM BRASILIAE, AMSTERDAM, 1648.



he lives upon cecropia buds and dew, as Doctor Brehm declares, or upon armies of ants swarming in the hollow stems of the cecropia tree, it is certain that he haunts only that tree, which spreads out broad leaves whose white, lower sides reflect light into the sepulchral shade. It furnishes him with more food than he needs, and food is his only necessity.

The rain pours, he listlessly hugs his branch, a sorry spectacle, emitting from time to time a deep sigh. His eye is dull, he knows no joy, no sorrow. He needs no sleep, no relief from a life which is nothing but respite. The odds seem too great against him to perform the simplest acts of life.

The climax of activity is reached when, like a wad, he falls to the ground, apparently devoid of life.

After a while he unrolls and progresses with circumspection upon closed claws to the next cecropia tree. Then he climbs to the very top, where he begins to eat, supplied with food on the down journey. Hunger compelling, he unbends from a position of unusual discomfort and pushes himself along his branch upside down.

Over-cautious in every motion, he never loosens his rigid hold from one limb until securely clamped to the next one. Each movement causes a long, sad yowl of pain. It is amazing that so cutting a sound can issue from his soft mouth.

His weird cry is a jungle symbol — mysterious hint of antediluvian days when the elephantine sloth lifted up a mammoth wail to be taken up by the glyptodon and the dodo.

In the desert man exclaims: "If only there were water! The soil is fertile. There is sunlight and warmth enough to make a tropical paradise. If only there were water!" And so, although he does not exactly worship water as the Yuncas of antiquity did, this man sings secretly in his heart a hymn to the god of water.

Up on the icy highlands man exclaims: "If only there were warmth! The soil is fertile, there is plenty of water, only warmth is lacking to make a paradise. If only there were warmth!" And he sympathizes with the Incas, whose god was the Sun, and waits through the long nightwatches until, with his rising, life is renewed.

In the jungle, water brings fertility to a soil bathed in the light and warmth of a tropical sun. It pours down from melting snows of the mountain-tops and gushes from the ground to meet the rain. Here, where man might live with least effort, he squats on the lowest rung of the human ladder, his savage desires satisfied as soon as realized. The sun needs no propitiatory offerings, water needs no exhortation. Invisible powers have conferred all gifts which his mind could imagine or his heart desire.

But in the midst of luxuriant plenty, like the Indian above the mine, poverty-struck for want of the very riches he sits upon, he is merely dying out for lack of everything with which he is surrounded. With a remedy at his command for every ill, he hangs about his neck a string of tapirs' claws in case of need. As there is lack of nothing to supply his wants, so there are few wants to be supplied. A whole tribe lives on a single species of tree, like insects depending on one fruit or leaf for subsistence, or the sloth hanging on the cecropia tree, which has senses sufficient to appreciate sights and sounds and smells, but remains insensible. The jungle

people seem to recognize the likeness and call one another "beast of the cecropia tree."

As there is surplus of everything here, evil gifts have been bestowed as well. Poisonous insects sting for life; the fierce jaguar and fatal vampire, whose velvet kisses are a death-brand, bite for life; so do snakes; and the huge boa crushes the bones of its victim. The strong attack the weak, the cunning inveigle the unwary. Injurious or beneficent, all must fight for life, joining in the great struggle. Each variety contends with every other, vegetation fights to keep out animals, animals with birds, insects with one another, and all against the water, whose level silently rises over its foes. So man must struggle against nature. The jungle is his only teacher. He takes from it what it offers. He is the mere imitator of the vegetable world, a product of it in modified form. He sees strife in air, earth, and water. His religion can conceive only strife of two extremes, dying and living, evil and good, one injurious, the other beneficial. Evil spirits inhabit birds and beasts and whirlpools of the mighty rivers. The dim forest is filled with

powers of destruction. They lurk in the black lizard and less dangerous ones in the parroquets. Since all sickness is brought by evil spirits, it is they to whom prayers are made. Some jungle savages believe in a transformation into animals and name their children for them. If there are any thoughts of a future life, they are in jungle terms. After death these people wish to be turned into animals, which sometimes happens. "On the eighth day a red deer jumped from the grave and ran away into the forest. They did not see the soul enter the deer, but they saw the deer rise from the grave "! Some worship sun and moon, an Inca custom. But the moon with its phases and its weird shadows in the jungle is involved in special mystery. These savages understand the jungle, but facts plain to us compose their mystery.

If a man is sick, something grows near by to set him all right again. They use nature's remedies against her poisons, as they have learned from birds and beasts to do. They collect various sympathetic medicines, such as teeth of poisonous snakes, and carefully fix them in leaves and tubes of rushes — powerful

specifics against headache and blindness. They fill flask-gourds with balsams, and collect odorous gum for incense.

War is their only object lesson, so quite naturally their only preëminence is in the art of killing. The chief cause of war is stealing of women; some are worth as much as a hatchet, some only the price of a knife. In times of fighting the savages howl through a giant reed in blood-curdling discord. They shoot with parrotfeathered cactus-arrows dipped in famous poisons, or thrust through an enemy with a macana — a wooden sword as sharp as steel or fell him with a club of wood like iron. Then they make drums of his skin to serve as warning to his friends. They protect themselves with a shield of creeping plants interwoven, covered with a tapir skin and edged with the feathers of parrots.

The only amicable exchanges between tribes are the poisons done up in reeds into which they will dip the arrows used each against the other. Some poisons, made by women and old men, can kill an animal without injuring his flesh for the use of man. Some make him merely wither

away. Some do not take effect until three days after the wound is inflicted.

The whole history of man, beginning with the Stone Age, could be studied among the wild tribes of Amazonian Peru. The largest tribe numbers nearly twenty-five thousand, many but a few families, and one tribe has now not a single member left. Differing each from the other, they are similar only in that they all represent the first steps of human development.

A savage of the jungle perforates his face to insert feathers and shells; he gouges it with sharp flints and rubs in indelible color. He slashes his lips both within and without and stretches his ear-lobes as far as the shoulder. Ther he inserts knobs of chonta-palm wood. He paints his face yellow and suspends a red bean from his nose. Or he paints his face in the four quarters, blue, yellow, red, and black, and dyes his hair red with achote, his body orange with armatto, staining it in design with dark juices. The Prios color their teeth; others leave their teeth unstained and wear a long, yellow mantle. The Conibo flattens his head, or that of his child, between boards into fantastic

shapes, leaving holes through which the cranium can develop. He leaves single locks of hair on conspicuous promontories. Toucans' feathers are stuck to them with wax. On days of celebration he dances in ropes of iridescent birds strung through the bills, his bead girdles of barbaric design hung with humming-birds as tassels. He knows no fashion but personal caprice. There is no limit to the vagaries of the world about him, neither are any suggested for his own decoration. Cross-wise over his shoulders he slings long scarfs of brilliantly colored birds hung at the end of chains made of their little leg-bones, along with boxes of poison for his arrow-heads. His necklaces are of the teeth of jaguars, wildcats, and monkeys, or of the curling teeth of the white-lipped peccary. From his anklets and wristlets of heavy, wooden beans he shakes a jungle call, wielding a feather scepter in savage rhythm about the stiff feather halo upon his head.

As might be expected, the jungle savage adores music, if so it may be called. He imitates the cries of forest animals. Some tribes have war songs; then they use a bone flute or a

reed. The Aguarunas have a violin with three strings. This is the most intelligent tribe, but they use their superior intelligence in reducing the heads of their enemies. One is often compelled to wonder whether greater brain-development means greater usefulness.

These seem to be the facts: The head of an enemy being cut off, poisons are poured into it, softening the bones so that they can be drawn out through the neck. They are then replaced by red-hot stones to which the head, reduced to one-fifth its original size, adjusts itself in the steam of a bonfire made of roots of certain palms.

A jungle story runs that a scientist from Germany tried to investigate these sinister processes. But his head, in miniature form, was soon stuck upon a pole. It could be recognized by the long, reddish beard, which had retained its original proportions.

To qualify as a warrior a youth must possess at least one reduced head of his own making. As time goes on, he adorns himself with more and more such trophies.

Some similar custom existed on the coast in [289]

ancient times, for these little masks have been found in the *huacas* (grave mounds). The first reduced heads were exhibited in Lima in 1862 under the rare title, "Heads of the Incas"!

The Macas and Jivaros are believed to have this practice as well, and a tribe exists near the Cusicuari, the Rio Negro, and the Orinoco, reported as able to reduce entire bodies in the same manner.

Some tribes preserve their enemies' hands, others keep their teeth, and some eat their enemies whole. A man speaking a different dialect is eaten like an animal of a different species. The Amahuacas pulverize the bones and eat the ashes in their food, in order to absorb the physical strength as well as the moral virtues of the person gone before. Although they are never eaten, the women of cannibal tribes are said to be more cannibalistic than the men. Prior to such feasts they fatten the prisoners of war, who "rather enjoy the prospect, and gorge themselves to accommodate their keepers. They occupy themselves tranquilly with their duties as slaves without attempting to escape."

Another practice of the Aguarunas is making the tundoy, or tunduli, their jungle signal-service. They hollow a tree-trunk and make three holes in it with red-hot stones, then hang it aloft on a high tree, fastening the lower end securely to the ground. Blows upon it with a wooden mallet reverberate as far as ten miles, and form a code, by their swiftness or slowness and their pitch above, between, or below the holes. As a hundred words suffice for a language, so would three tones for a drum of war. Primitive man in the primeval jungle sending blood-curdling signals to reduce the heads of his enemies! Reverberations whose wave-lengths are intercepted on their echoing passage through the forest by the flight of royal butterflies and challenged by the chatter of antediluvian apes!

The weaker tribes are actually, not in name merely, pushed back into the woods. Many traits in us find a literal, physical parallel in them. We speak of "licking the dust;" in the jungle there are tribes of earth-eating savages. A civilized man in the jungle learns their literal ways. He puts gunpowder on the bite of a serpent and cauterizes by igniting it. Having

no language adequately to express the venomous thoughts they may feel, they use poisoned arrows. They literally reduce an enemy's head, and are more humane than we, doing it after death!

The Inje-inje represent the Stone Age, both in their tools and language. They come out of inaccessible hiding-places to perform their primeval rites by full moon and are the least known of all the savage tribes. This small tribe of the Inje-inje, whose name is the sum of their language, need only a word to steer their craft through life. As has been said, the development of language from the primitive Inje-inje to the somewhat developed Aguaruna can be studied in this mysterious place. No tribe can count further than ten; most of them use only a movement of the fingers. Though there are hundreds of "languages," not one Amazonian tribe can write.

In temperate zones nature is to be relied upon. Roots grow in the ground, branches and leaves in the air, flowers come forth at certain seasons, and fruit follows. Trees give us shade

in which no fever lurks. Vegetables do not relieve agony and want, as insects and plants do not cause it. No animals lie in wait to seize us, no snakes to uncurl and engulf us. Rain comes in measurable quantities. We live on a tempered, miniature scale. We can afford to neglect reckoning with nature, for we understand her laws, and we direct her by that understanding.

But what can be said of the jungle? Had we thought of gardens as suitably placed in tree-tops? Or of an edge of wood as sharp as an edge of steel? Here accustomed flowers grow as shrubs, and shrubs as trees. It is a region where insects are mistaken for birds, where animals imitate a flower on the branch where they like to rest; where plants have fragrance, and blossoms burst forth from roots or rough bark; where birds gain protection by assuming the dazzling colors of tropical sunlight, and butterflies by the warning colors of their neighbors. It is a region where roots grow in the air; oils, wax, and honey are secreted by leaves; where the death of anything gives new, vital impulse to something else, and parasites

are as significant as their supporters. Curious region, where there are night-flying butterflies and softly-feathered moths to fly in the day-time; where everything is reversed: animals, whose normal is upside down, prefer tree-tops to the ground, birds of prey are frightened by the painting on a butterfly's wings, caterpillars sting, spiders kill birds, and water is the principal element of the land.

Dramatic indeed is the silent jungle. The insect is imprisoned in the throat of the orchid, whose honey it had been unwarily seeking. Trees distil venom. Plants have fangs. Perfumes affect the brain. Cold, green creepers blister like fire. From vampires which suck your blood as you sleep, to the touch of a vine which paralyzes your entire body, the jungle knows all modes of attack and furnishes the cure for every ill it has created.

What can be taken as the symbol of the jungle? The snake, mysterious, deadly, bound together in savage traditions with lightning, wind, fire-streams of lava, and river-whirlpools, those emblems of serpent treachery? Or butterflies, with their symbolism of life-recurrent?

Or the orchid, emblem of wayward unwhole-someness? In the troops of monkeys which skip, swing, bounce from tree to tree, throwing themselves to be caught by prehensile tails, is its exuberance. In the honey dripping from hollow trees and running off unused, is typified its surplus. Iridescence darting from insects and from birds, rainbows glinting over cataracts or caught by the equatorial sunshine from misty hillsides, might be its symbol; or the beneficence of jungle trees and bushes.

Not one would be more or less typical than any other. All are equally emblematic. If we think of caprice, there is law; of life, there is death; of beauty, there is horror. When each seems most dominant, then its opposite is most uncontrolled.

The seed dies that the plant may live; the blossom withers that the fruit may set; the worm vanishes that the butterfly may spread its wide wings and fly. Plus and minus signs are never far apart indeed.

CONCLUSION

Peru is the Land of the Sun. Its light and heat descend upon the coast with tropical fury, reducing the desert to a shimmering vibration which breathes back scorching odors toward the sun. The sun alone makes life possible upon the arctic heights where, in Inca days, it was worshipped in name as well as in fact. Yet beyond the mountain-barrier the same constant sun has no longer undisputed sway. The jungle is "almost uninhabitable through too great abundance of waters." Peru is the Land of Water, without which the desert is barren, because of which the jungle is luxuriant.

But the sun, the god of Peru, controls the water. It can combine with its opposing element. It is able to transfigure even the rain, which, like human hopes, becomes iridescent because the sun shines. The rainbow is a willing Ariel, the servant of each, retreating from

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the sun only as far as the rain allows and illumining the rain only as far as the sun permits.

The rainbow is visible nature's alphabet. In terms of it are spelled sky and sea, trees, birds, and flowers. It shoots the desert-mists and twinkles along the streams which intersect it. It fearlessly embraces the austere crags of the mountain-peaks and shimmers in the craters of volcanoes.

Entire it flings itself from the heart of a shower, follows the waves of the sea along, or glints on a butterfly's wings or from a humming-bird's throat.

It reveals the elements of the stars, it lists the ingredients of the sun, and sets down upon its ephemeral tablet the red-hot vapors rising from the desert. Even the breath of the volcano has a place in the rainbow alphabet.

It is hard to avoid so fundamental a thing. Close your eyes in the sunlight, and its whole scale is thrown in glistening repetition across your own eyelashes.

Even the ultra-violet—the unknown, the unperceived—must be discussed in rainbow terms, the only letters the eye's alphabet knows.

The Incas chose it for an empire's emblem and dedicated to it a temple close to that of the Sun.

It symbolized to the Spaniards the astounding country which had fallen as by miracle into their grasp, the land of mystery, whose romantic wealth and dazzling promises encircled them as with the rainbow arch, and, like it, receded as they advanced.

Peru still keeps the rainbow symbol. Manycolored mysteries hover about the man who leans over its glittering jewel-casket. And wherever the ends of its bright bow touch the desert, flit over the mountain-tops, or sweep across the jungle, nature's unexplored secrets lie concealed.

There is, however, a difference. For the rainbow-arch which mingles sunlight and water is only an evanescent promise, vanishing almost as quickly as it can flash a new gleam of hope into a human heart. But Peru, with its changing beauties and its mysterious allurements, is a fact. The pot of gold which it promises is real.

THE END

BIBLIOGRAPHY

OF all the general works on Peru none has greater weight than Peru; Beobachtungen und Studien (1893) by E. W. Middendorf. He has exploited the country in a large, threevolume work with such German thoroughness that hardly a fact has been left for subsequent writers to disclose. I have referred to it constantly. Other shorter, general studies of the country are Von Tschudi's Reisen durch Südamerika, giving much attention to folk-lore, and Twenty Years' Residence in South America (1825) by W. B. Stevenson, secretary to Lord Cochrane. He traveled far and wide in Peru and made observations in regard to remote details. Typical of descriptive writings is Two Years in Peru (1876) by T. J. Hutchinson. Various general works by Bernard Moses and his publications in the University of California Chronicle are valuable, notably his work on the produce of the mines.

Reliable observations on ruins are those made by E. G. Squier in his Peru: Travel and Exploration in the Land of the Incas, by Mariano Rivero y Juan de Tschudi in Antiguedades Peruanas, and by Charles Wiener in Pérou et Bolivie. Studies of ruins in particular localities have been made by many archaeologists; for example, on Tiahuanacu, L. Angrand, in Antiquités Américaines, though his book is now out of date, Adolph F. Bandelier in his Islands of Titicaca and Koati, Max Uhle, with whom I visited some of the ruins, on Tiahuanacu and Pachacamac, and Hiram Bingham in recent explorations.

BIBLIOGRAPHY

Sir Clements Markham has spent more than fifty years studying every stage of Peru's history from the time when it was a land of myth to the Chilian war. His researches as well as his careful translations have been published in a series of volumes. Authorities on various periods of the history are legion. Relating to pre-Inca times, in which studies of myths and theories of ruins are intermingled, original sources are the Memorias Historiales of Montesinos, first published in French in 1840, and Cieza de Leon, the soldier, whose Crónica del Perú (1553) is authority on the Incas. Some modern scientists who have written about the pre-Inca period are Ernest Desjardins in his Pérou avant la Conquête Espagnole, Tylor's Primitive Culture, Meyen's Über die Ureinwohner von Peru, and Brinton in his Myths of the New World and other works. Many persons are studying the legends, as, for instance, Professor Liborio Zerda of the University at Bogotá. The Miscelaneas Australes of Miguel Cavello Balboa, a soldier, is an original source for knowledge of the remote Chimus. Das Reich der Chimus by Otto von Buchwald, and especially Das Muchik oder die Chimu Sprache by Doctor Middendorf, who quotes largely from Calancha and Carrera, are modern authorities.

In regard to the Incas: As a background there are the old, picturesque chronicles which read like romances, but on which reposes most of the knowledge that modern authorities have corroborated in regard to the earlier inhabitants of Peru. These contemporary accounts have to be carefully studied in order to distinguish fact from fiction. Next to the *Crónica* of Cieza de Leon are the *Comentarios Reales* of Garcilasso de la Vega, in whose own veins the turbulent blood of the Conquistador mingled with the blood of the Sun. During his lifetime the imperial race of his mother was exterminated by the fierce adventurers becoming

grandees, of whom his father was one. His book has the value of personal reminiscence. His enthusiasm adds a certain glamor; but even if his unique work has been spurned as an Utopian romance, it has been reluctantly accredited as the foundation of facts set forth by its critics. De las Antiguas Gentes del Perú by Bartolomé de las Casas, works by Diego Fernandez, Betanzos, Oviedo, Sarmiento, Cobo, Ondegardo, Molina's Fables and Rites of the Incas, and the great Miscelaneas of Balboa must be consulted. Many of them have been translated by Sir Clements Markham and published by the Hakluyt Society of London.

It is bewildering to try to single out one or two modern works upon the Incas, for their name is legion. The definitive authority in English is of course Sir Clements Markham, whose *Incas of Peru* (1910) has followed numberless more detailed works of his own upon the subject.

Der Belus oder Sonnendienst auf den Anden oder Kelten in America by Frenzel, presents one field of theory which observations on the remains of the Incas' walls suggest. The temptation to interpret by means of analogies to other remote civilizations is withstood with difficulty. From John Ranking and his Historical Researches on the Conquest of Peru by the Mongols, to Ignatius Donnelly and his evidence in favor of its conquest by the Egyptians via Atlantis, Peru has given an unlimited field for speculation. Lord Bacon believed, by the way, that Peru was a proud kingdom in the time of Atlantis. A striking example of immense erudition expended on a futile, though technically well-supported, fancy, is Rudolph Falb's Das Land der Inca. Painstaking scholars are tracing out similarities between the Peruvian language and the Semitic and Phoenician tongues - "astounding affinities," of which common stems are purest in Quichua, so that the human race seems to have emanated from the

tops of the Andes; similarities, too, between Peruvians and the long-bearded Druids whose rites were chiefly sun-worship: they also kept memoranda with strings tied in different knots, like the quipus, and built vast structures of stone without tools. There are analogies between Peruvians and Hindus, who worshipped the Sun as Rama and called their first legislator Vaivasaonta, the Son of the Sun, and between Peru and Farther India. The Seccos have been called the Malays of Bolivia. There are analogies between Peruvians and Chinese, whose royal color was also yellow, whose peculiar god from earliest times was the Sun, who used quipus, who had terrace-cultivation and irrigation-systems like those of the Incas, who used foot-messengers for royal emissaries, and brought all the gold and silver of the realm for the beautifying of royal temples. "The buildings, religious institutions, division of time, and mystic notions," which "seem in Asia to indicate the very dawn of civilization," are found here upon the Andes. Whether there was intercommunication, or whether such facts merely suggest the instinctive discovery of all peoples, their origin is wrapped only in mystery — a veil whose lightest corner is only just lifting.

But to continue with the succeeding periods of history. Spanish vice-regal days and the civil wars of the conquerors, the fleets of treasure, the Inquisition, have been the subject of romantic histories. Besides Prescott's well-loved Conquest of Peru, William Robertson's History of America, published more than a century ago, gives a concise, general survey since the Conquest. Drake's Worlde Encompassed and Southey's account of Drake's voyage in his English Seamen, as well as Froude's, together with various Hakluyt publications, are authorities for freebooter days. Also there are such cold authorities as the Calendars of State Papers of

many countries, E. Armstrong's The Emperor Charles V, and for the Inquisition, H. C. Lea, Vicuna Mackenna, and Ricardo Palma. The reports to the Royal Council of the Indies of the sixteenth century enter into minute details. Father Acosta was the historian of the third council. His Historia Natural y Moral de las Indias, first published in 1590, is an indispensable book, although it has borne the reproach of being superficial.

The French Academicians came to Quito in 1735 to measure an arc of meridian, an enterprise which d'Alembert considered the greatest ever attempted by science. One of these scientists, La Condamine, made extensive studies in quinine, named cinchona for the Countess of Chinchón. vice-queen, and one of the first to feel its beneficent power. His Voyage fait dans l'Intérieur de l'Amérique Méridionale (1745), and the Voyage Historique de l'Amérique Méridionale by Antonio y Jorje Juan de Ulloa (Spanish edition in 1748. French in 1752), who accompanied the French expedition, both aim at truthfulness. Another delightful as well as dependable work of the eighteenth century is the Voyage dans la Mer du Sud by Amédée François Frézier (1716). In particular must be mentioned Lozano's Histoire des Tremblements de Terre arrivés à Lima. Hales of the Royal Society of London has added to this French edition of 1752 accounts of Lima in his day, trustworthy as his observations on the geology and meteorology of the coast.

Such facts as I have stated in regard to the natural history of the coast are vouched for by Ferdinand von Hochstetter, Die Erdbebenfluth im Pazifischen Ocean, Friedrich Goll, Die Erdbeben Chiles, a remote work on El Desierto de Atacama, Humboldt's Vues des Cordillères, Darwin's Journal of Researches, and the Voyage of the Beagle, the three latter describing the natural history of the mountains as well. One

or two of Sir Martin Conway's books, Alfons Stübel, Die Vulkanberge von Ecuador, and Neveu-Lemaire, Les Lacs des Hauts Plateaux de l'Amérique du Sud, may also be added. In describing the animals of Peru I have as authority Brehm's Thierleben.

Ricardo Palma's Revista de Lima and Carlos Romero's Revista Histórica de Lima, Manuel A. Fuentes' Estadística General de Lima, published in Paris in English as Lima in 1866, give interesting information in regard to that city.

When it comes to the Amazonian wonderland no exaggeration could compete with fact. But I have not withstood the temptation wholly on that account! There is Louis Agassiz' A Journey in Brazil, H. W. Bates' A Naturalist on the River Amazon, two books by Alfred Russel Wallace, Tropical Nature and Life on the Amazon, Raimondi's El Departemento de Loreto as well as his El Peru, Robert Southey's History of Brazil, and the publications of the Sociedad Geográfica de Lima.

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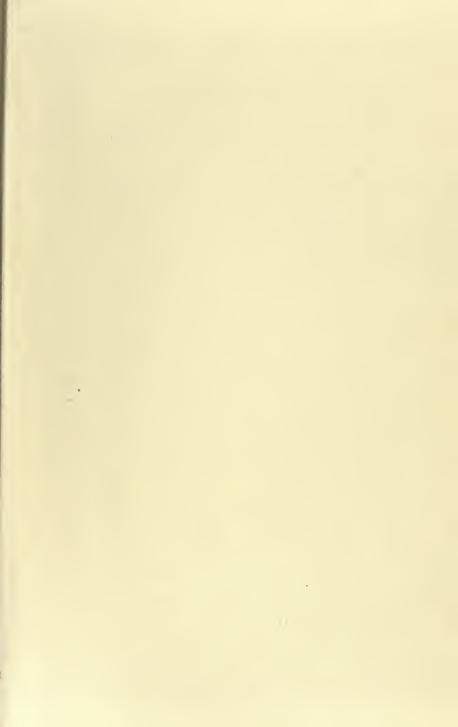
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