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THE COUNTRIES OF THE WORLD.



## 'THE

## COUNTRIES OF THE WORLD:

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A POPULAR DESCRIPTION OF TIE VARIOL'A CONTINENTS, ISHANDS, MIVERS, seas, AND PGOPLES OF THE GLOBE.

M

## Robert Brown, w....


Author of "The Pcoples of the World," etc. etc.

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21,500
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# THE COUNTRIES OF THE WORLD. 

## CHAPTER I.

Cevtral Ambimca: Its Pohysical. Geograpify.

 IREE hundred years ago, or more, the region we are now entering was a land of romance. A century later it was still the serne of many a light for gold and for ghory, and even in the memory of those not long agg dend, its bays, "keys," and danky river months were the lurking-phaces of the pirates and buccancers who made the Caiblema Sa and the Calf of Mexico waters dreaded by the peaceful mariner. The neek of land connecting North and Sonth America, w.: dividing the Pacific from the Athantie, has always ocenpied a prominent prsition in the vorld's history sinee the day when Vaseo Nanc\% de Ballhan first crossed it and sighted the "silent sea" heyond. The man whose name is hencelorward lior all time to be linked with this great and gallant exploit-the noost commander-like sollier of his day-arrived at the isthmus in a most prosaic lishion. He was a bankrupt of Hayti, or Hispaniola, and as the Ilispaniolians objected to people who owed money leaving the island, Ballow was smuggled over to the Spanish Main in a cask on bard Enciseo's vessel. Such was the mamer of the man's coming. From that year-1.51:3-to this, the isthmus has seen a mighty succession of similar heroes. For nearly three centuries it witnessed a strean of armed adventurers struggling throngh the forest, driving lefore them troups of wasting Indians laden with cammon and stores, panting to reach lamama. From Panama they spread sonthward in search of the gold and silver of the lucas of Peru, and northward to take tithe of the riches of the Aytees of Mexico. From the south and the north agoin were ever pouring thools of adventurers, returning homeward baten with ill-gotten wealth, or enledbed with womuds, discase, and disappointment. To l'anama came the "plate ships" from that empire of the Indies which Columbus and his companions had won for their sovereign, and in or about Pamama waited the cruisers, the buceancers, or the pirat" -for it is dillicult to distinguish them-of all nations, ready to reap where they had never sown. Then the seme changed. To banama came wanderers in search of wealth, content to live ly honest labour and fair trade. But the ill-fated Darien expedition is a sad page in Scottish history. Then the colomists shook off
the hated yoke of Spain. They escaped a despotism, but speedily groaned under a democracy which no master spirit has even yet been able to control. Anarchy and revolution reign supreme, and the unhappy land has for fifty years seen 400 rulers, all incompetent, and ferw worthy, in even a remote degree, of the position to which they attained and temporarily hell. A few years more, and the isthmus again saw crowds of excited men rushing after gold. The old days of the conquistadores were revived in another form, and the gold-seekers of California and British Columbia were almost as wild after riches as their predecessors, the companions of Cortes, Pizarro, and Balboa, and nearly as lawless as those of Morgan, Drake, and Dampier. For years millions of treasure were carricd over the railway, which now spans the isthmus, just as in days past millions were borne across on the way to Spain. But, as in these days, little remains. Over the soil of Central America wealth passed, but the wealth passed away. Yet those who oftentimes plundered Panama conld scarcely bolieve that the city was poor; a city that saw so much gold must surcly have some of it. Under any other people than the Spaniards the isthmus, so favoured by geographical position, ougbs to grow great aud powerful. But it does not. Even the prosperity which the railway for a time gave it has partly gone, for the traffic to California crosses the American continent far to the north, while in time Vera Cruz will be the starting-point for a network of railrays which will open up Mexico and let into that country the sweetness and light of a more wholesome civilisation than its own. By-and-by a canal may join the two oceans that lave the shores of Central America, and again bring prosperity to the country through which it is cut. But when that happy event takes place, Centrai America will doubtless feel the grasp of stronger hands than those which now supervise, but neither guide nor control, the chaos which is dignified by the name of government.

Central America is a very natural division. It is the narrowest portion of the continent, and forms a well-defined nexus between its two great land masses. Properly speaking, it should include the whole extent of territory from the Isthmus of Tchuantepec to the Isthmus of Darien. Politically, however, it only comprises the five independent Republics of Guatemala, San Salvador, Honduras, Nicaragua, and Costa Rica, with the English colony of Belize, or British Honduras, which may be said to be the Atlantic coast region of Guatemala, and that slice of Nicaragua which used to be known as the kingdom of the Mosquito Shore. The Isthmus of Tehuantepec and the Peninsula of Yucatan are now included in Mexico, while the Isthmus of Panama constitutes a State of the United States of Colombia-the Old Republic of New Grenada-and is therefore, politically, a part of South America. However, political divisions have nothing usually to do with natural ones. Accordingì, in the following pages we shall consider Central America, physically, as comprising most of the isthmus; though, politically, we must speak of it as embracing only the republics and colony already mentioned. For convenience sake we may first sketch out the broad features of the region, then consider, so far as may be, each political division individually, and then, on the basis of the knowledge thus acquired, give a more general account of the products and resources of the whole region, as well as the social features which may be common to all of it.

## General Geography.*

Glancing at the map of the world we see not only how almost in the centre of it is the region we are about to describe, but how favoured it is in having abundance of harbours and diversified features. At the Isthmus of Tehuantepec the Gulf of Mexico approaches the Pacific to within two hundred miles. Southward, the isthmus widens out and embraces the high temperate table-lands and mountainous region of Guatemala on the west; and the plains of Tobasco, Chiapas, and Yucatan, in Mexico, upon the north and east. The Gulf of Honduras on the south-east, however, again narrows the continent to less than two hundred miles. Here also the nountain chain of Cordillera is interrupted, and its place is taken by a great transverse valley, only divided by a sliglitly elevated ridge, from one side of which the large river Ulua flows to the Atlantic and the smaller Goascoran to the Pacific. Further south is Nicaragua, with a great basin-like formation, in which lie the well-known lakes which give that portion $\rho_{2}$ the isthmus its chief importance, while still nearer the equator is the Isthmus of Danama, or Darien, over which, as Mr. Squier aptly remarks, "the tide of emigration has twice poured its floods, once upon Peru, and again upon the glittering shores of California." It has been observed of the isthmus that it possesses in its physical aspect and configuration of surface something belonging to all the world. "High mountain ranges, isolated volcanic peaks, elevated table-lands, deep valleys, broad and fertile plains, and extensive alluvions, relieved by large and beautiful lakes and majestic rivers, the whole teeming with animal and vegetable life, and possessing every variety of climate, from the torrid heats to the cool and bracing temperature of eternal spring. The great chain of the Cordillera here, as in South America, runs nearest to the Pacific Coast, but in places it is interrupted, and assumes the form of detached ranges and isolated elevations, groups or knots of hills, between which the streams from the interior high valleys or elevated plains wind their way to the two oceans. As a consequence, the principal alluviona horder on the Gulf of Mexico and the Caribbean Sea. Here rain falls in greater or less abundance for the entire year, vegetation is rank, and the climate is damp and proportionately unsalubrious. The trade winds blow from the north-east, and the moisture with which they are saturated, condensed on the elevated parts of the continent, flows down towards the Atlantic. The Pacific slope is therefore comparatively dry and healthful, as are also the elevated regions of the interior." $\dagger$ This configuration of the surface has had from the remotest time, as it has yet, an influence on the destinies of the race who inhabit the isthmus. On the high table-lands of Honduras and Guatemala lived a people advanced in civilisation, of great intelligence, carvers of sculpture, builders of cities,

[^0]and artificers in the precious metals. In the wide and fertile savannas or prairies lay lands inviting to agriculture; while the maize-that all-powerful element in American civilisation-was probably indigenous in this part of the continent, and spread thence northward, as the tribe from this officina gentium migrated in search of new homes in Florida, and even to Mexico. On the Atlantie shores, on the other hand, there is nothing to cause us to believe that the aboriginal iuhabitants have ever been anything but the rudest savages. Here nature is also bountiful, but not in the direction tending to the benefit of

new on the hio delee, gutemala.
man. The damp swampy shores produce a rank vegetation which even the appliances of man have been unable to cope with, and the steaming soil sends up pestilential miasmatic vapours. In this sweltering region man could form no permanent settlement, nor could he suecessfulty cultivate the soil. Hence he has become-as to his habits-a nomadic hunter, while the struggle for existence eats out of him, or rather fails to give him leisure for any religious aspirations worthy of the name, or to develop political or social institutions of a stage more advanced than that of the family. In the limited sense we have taken it, Central Ameriea will contain in round numbers nearly 15,700 square geographical miles, is in length from 800 to 900 miles, and has a varying breadth of 28 to 300 miles. Both on the Atlantie and Pacifie shores there are numerous seaports. We may particularise, on the Carilbean Sea, Yzabal and Santo Tomas
in the Republic of Guatemala; Omoa, and Truxillo, in Honduras; San Juan Del Norte, or Grey Town, in Nicaragua; and Matina, in Costa Rica. On the Pacific shore there are Nicoya, belonging to Costa Riea ; Realejo, to Nicaragua; La Union, or Conchagua, Libertad, and Acajutla, belonging to San Salvador; and Ystapa, to Guatemala. The last three, however, are mere open roadsteads, but the others are very good harbours indeed. In addition there are San Juan Del Sur, in Nicaragua; Culebra and Salinas, in Costa Rica, though in an almost uninhabitable district ; Jiquilisco in Salvador, and Olos in Guatemala, all on the Pacific.

view on the nio polochic, ofatemala.

The mountain range which forms the backbone of the isthmus is not so elevated as the mountains further sonth and north. Yet the peaks are by no means low, some of the more prominent points rearing to nearly 14,000 feet, though from 5,000 to 7,000 feet may be taken as the average. There are amongst them several voleanie eones, two or three of them still aetive, and the others extinet. They are all near the Paeifie eoast, none being found in the interior or close to the Atlantic shore. This chain sends off lateral spurs, so that the whole of Central Amerifa is an alternation of momntain valleys elothed with dense vegetation, and nowhere allowing of great plains, though naturally presenting so immense a variety of climate, that in the course of a day's journey the traveller may pass through hot, temperate, and cold regions. The great mountain ranges disappear before they reach the Isthmus of Panama, the high Cordillera of the north and south dwindling down to elevations of from 500
to 1,000 feet, and which do not even form a continuous chain, but are isolated and independent of each other, so that every here and there low plains or valleys intersecting the isthmus can be found amongst them. Rivers are found everywhere, and hot springs-as might be expected from the voleanic character of the country-are common. None of the rivers are, however, large, and before most of them can be of much use for navigation they would require to be greatly improved, as they are liable to be silted up by the washing away of the soft clay banks between which they generally flow. All of them are obstructed by bars at their mouths; many of them have falls and rapids, and owing to the rapidity of the current and the amount of sediment they are continually bearing down to the sea, are apt to get shoaled up here and there, and, accordingly, have a very variable depth. The San Juan is perhaps the river which is of most importance, but even it of late years has got shoaled up in places, and owing to the formation of a bar at its mouth, has been all but destroyed for navigation for any craft save small steamers. The lakes of the region are in some cascs of large size, but only three of them, namely, Nicaragua and Managua in Nicaragua, and Golfo Dulce in Salvador, are ever likely to be of any great use commercially as a highway for commerce or travel. The Golfo Dulce, or Gulf of Dulce, is the means by which most of the foreign trade of Guatemala is carried. It communicates with the Atlantic by a smaller lake called the Golfete and the Rio Dulce. The Polochic we shall have occasion to mention when speaking of Guatemala, through which it flows, first discharging itself into the Gulf of Dulce, and then into the Bay of Honduras (pp. 4, 5).

## Climate.

With the exception of the lowlands, Central America is not so hot as we should expect a region occupying nearly the middle space between the equator and the Tropic of Cancer to be. The heat of the Pacific shore, owing, probably, to the greater dryness and purity of the atmosphere in that region, is not so intense as on the Atlantic coast. The north-east trade winds arrive at America laden with moisture, but the greater portion of their vapour is intercepted by the mountains of the interior, and flows down the Atlantic slopes in streams aud rivers. But the mountains of Central America are not high enough or continuous enough to entirely intercept the trade winds. Accordingly they blow entirely across the continent at this spot, arriving, however, at the Pacific deprived of much of their moisture, and cooled by passing over the elcvated region of the interior. Hence, as Mr. Squier has pointed out, the greater salubrity of that declivity, the comparative coolness and dryness of its climate, and the consequently more numerous population. On both coasts heavy derss fall at night, but at higher elevations, at and above threc thousand feet, the dews are slight, and "the nights as dry as the day." The result is that these regions look arid and burned, and are never clotbed with the bounteous vegetation which, in spite of its drawbacks of climate, give such a charm to the lowlands and coast regions of the isthmus. The rainy season is usually from May to December, and is disagreeable enough. It does not rain in the tropies-it pours. A shower does not usually last more than half an hour, but it falls so briskly that in that period the earth is covered with water. Then the torrent ceases as abruptly as it began-" the sky as suddenly recovers its serenity, the sun comes out unclouded, dispersing the bumidity, and in a brief space
the earth becomes, to all appearance, as dry as if no rain bad fallen." The elevated plateaux have a climate of their own. On most of these rain falls in small quantities every month; but during the dry season the showers are slight, while during the wet one they are long and heavy. Continuous rains, or teimporales, as they are called, are here unknown. Johnson has ealeulated that the average amount of rain which falls in the tropics is 113 inches per annum. In some parts of Brazil it is 276 inches, and in Guadaloupe and a few of the Lesser Autilles as high as 292 inches. On the other hand, taking Honduras as a type, 48 inches fall on an average annually, while between Lake Nicaragua and the Pacific there falls-aecording to a return before me- 97.7 in one year. The mean maximum heat of the interior may be about $68^{\circ}$ Fahr., and that of the const $82^{\circ}$, though in many places-at Omoa, for example-it runs much ligher. The north coast and the Mosquito Shore are perhaps the most insalubrions places, while, as we have already remarked, the Pacific coast is much more healthy. The Isthmus of Panama has a elimate a good deal worse than any of the localities north or south of it, and as Central America is, unfortunately for its good name, familiarly associated with Panama, sweltering Colon, that home of intermittent fever, Chagres, or still worse with Portobelo, it may he well to point out that this portion of the region we are describing is exceptionally hot, owing to its low elevation. No doubt, take it all in all, Panama thoroughly deserves its infamous reputation. The heat is great, moist, and enervating. It takes the colour out of the ladies' cheeks, makes the most energetie of Britons languid, and in time destroys appetite, health, and temper. Passengers cross the isthmus as if they were passing through a plague-infected city. In these lovely tropieal forests through which the railway runs they seem afraid to breathe. In Panama they have more cause for dread, and once out into the Bay, and past the Pearl Islands of the buceaneers, they heave a sigh of congratulation that now they are out of danger. In reality, there is very little danger to the passing traveller if he takes ordinary care, and even the resident does not lose his health under several years. "It is," writes a resident, "the fashion to report the climate of Panama as a fiery burning furnace, and pestilential. I would not call it either the one or the other. In our house (it was a cool one) the thermometer ranged from $78^{\circ}$ to $84^{\circ}$ Fahr. I never knew it higher. I have even known the temperature to fall as low as $72^{\circ}$, and after a good spell of Panama we felt that cool. The dry season, commencing nominally in December and lasting until April, is the healthiest, and the first part of it the pleasantest. In December and January the intense heat has not set in; ouly in the morning, until the Norther, as it is called, begins, the warmth is oppressive. By 5 p.m. it is becoming cool, and through the night the fine fresh wind is delightfully refreshing. I have always found March and April most trying; then the heat is felt sensibly, and the effects are very debilitating. The rainy season is, up to a certain time, merely showery uncertain weather, and thunder and lightning vivid enough may be scen and heard every night. Later, there are terrific storms, sharp, short, and angry, and such crashes of thunder that the old crazy town seems falling in one mighty smash, succeeded by tropical rains in vast sheets, as if heaven opened to pour forth its seas upon the earth." The city of Panama is really more healthy than most places under the tropics; but the Atlantic coast, low and swampy as it is for a considerable distance from the
sea, is extremely pestilent. Miasmatic fevers and bowel complaints prevail, and yellow fever is not uncommon, though in mest eases it has been introduced from St. Thomas, Havanmh, and New Orleans, and rarely spreads among the natives or old acelimatised foreign residents. Light kinds of intermittent fevers are, however, common, and are extremely injurious to foreign constitutions in combination with the debilitating effeets of a tropical climate, though it only takes root after a certain term of residence.* Panama is hot-decidedly bot. Yet new-comers do not feel it very much. They have before reaching so far got somewhat accustomed to the tropics, and so far from complaining of the intense heat of the isthmus, they are rather astonished that the "place" has been so maligned. If the visitor escapes the initiatory fever he will get along very well for the first few months, and may possibly find the weather no hotter than that which he has experienced in London, Paris, or New York in July or August. But by-and-by he feels less inclined to go about. He may mount his horse for exercise, or go around the walls of the city to eatch the sea breeze at night, but he would much rather lie in an uneasy half-boiled sleep in his hammock. His digestion gets out of order; and in time be is disgusted to find that he is quite as indolent as the shopkeepers and other residents whose dolee fur niente life so stirred his astonishment and contempt when he first arrivel. "He sits," observes our late Consul in this city of evil odour, "in his shop, with his feet cocked upon the back of a chair, like a true Yankee, and he will bardly take the trouble to rise when his eustomers go in to buy; indeed, he seems generally most happy if he can say he has not the article asked for." Women do not thrive on the isthmus. They always look as if they were in a rapid consumption-lean, sallow, and seldom in good bealth. The children thrive better, but they also are pale from the effeets of the heat. There is little temptation to take exereise, and no winter to brace up a constitution enfeebled by the summer. Hence they languish, lose strength, grow old before their time, and yet rarely die much before the alloted span of life has expired. After a few years' residence, Mr. Bidwell has most truthfully observed, that what is generally experienced is a sort of lassitude, with a disinclination for exercise, and a derangement more or less of the digestive organs, which, added to the monotonous life of the ordinary dweller in these deadalive tropical regions, has a most depressing effect on the nervous system. Mr. Anthony Trollope has most thoroughly expressed this feeling when he remarks that the heat made him uncomfortable, but never made him ill. "I lost all pleasure in eating, and indeed in everything else. I used to feel a eraving for my food, but no appetite when it came. I was lethargie, as though from repletion, when I did eat, and always glad when my watch would allow me to go to bel ; but I was never ill." The longer one stays, the more thoroughly does he experience this feeling. He cannot labour hard, for in a few minutes he streams with perspiration, whieh may be healthy, but is decidedly exhausting and uncomfortable. He dare not walk about much in the sun for fear of sunstroke, and all the ills that the sun brings to mortals in its favourite land. There is no twilight here; the sun rises at once, and sets as suddenly, while a bad road through a tropical forest is neither a desirable nor a safe place for promenading on a dark night. He can read, if

[^1]the mosquitoes will allow him, but as he generally begius the day half tired, after a feverish broken sleep stewing in a hammock, or in a close tent-like mosquito-curtained bed, the chances are that the liveliest volume would send the reader asleep, I do mot think that 1 ever saw any one reading in Pamama, unless, perlapis, it was the Star und /Ierith, and then most frequently the student of that not very absorbing record of current new's was half asleep, and, if even uwake, never ly any chance exeited. An Irishman onee expressed an "pinion to the Consul regarding the climate of Panama, which is perhaps unscientitie to the last degree, and very Milesian, but yet exceedingly truthful. "lt is never at any season of the year cooler in Panuma: it may in some montlis be hotter than in others, lout

never by any chance cooler," even though the excessive heat of the day is tempered by the morning and evening brecze.

## Roads-that are: Canals-to be.

Roads throughout Central Amcrica, except a little way out of the larger towns, there are none. They are mere tracks, more or less worn and trodden by continual use in irregular directions, and making their way in the course in which they meet the fervest obstacles, regardless of the fact that it may be the longest and most inconvenient. In the dry scason these trails are not good; when converted by the tropical rains into ruts full of pasty elay they are all but impassable. Art had no share in forming them, and accordingly the States through which they pass seem to consider it unneeessary to apply any art to keep them in repair. Wheeled earriages are necessarily uncommon, all transit being by mules or horses, but more especially mules. From San Juan del Sur to Virgin Bay on the Lake of Nicaragua there was, when I crossed over it in 1860, a tolerably grood road, but as that route aeross the continent has been long 82
abandoned, most likely it has fast got overgrown with tropical herbage, and is once more a track through a tropical forest, and the quiet little villages by the way again sunk into their pristine state of somnolent inactivity. A railroad-the only one in the regioncrosses the Istlimus of Panama from the eity of Panama, on the Paeifie, to Colon, or Aspirtwall, on the Atlantic, a distanee of $47 \frac{1}{2}$ miles, of which line, and the people who live on its borders, I may have something to say further on. It was constructed at great cost of treasure and lives, and is kept up at very considerable expense. It is usually said that a man a sleeper was the expenditure of human life. But this is only a broad generalisation, for there were never as many men as there are now sleepers employed in its construction from first to last; but this we shall diseuss by-andby. Several other railway routes have been projected, particularly aeross Nicaragua, Honduras, and Tehuantepee. But they have never gone further than mere talk, the finaneial slough of despond in which Central America is always sunk, and the utterly unstable character of their government preventing anything like an approach to serious work. Indeed, for some time past the project of a canal has been more canvassed than that of a second railway. The Panama one supplies all that is necessary in that direction, and indeed all that the traffic will support. A short route through the isthmus would, however, be an engineering triumph, and revolutionise commerce to even a greater extent than the canal now in operation through the Isthmus of Suez. Eventually it will be made, and the nation that secures it will be mistress of the isthmus, and evontually of a great portion of the trade of the world. As very imperfeet and often erroncous ideas prevail on the subject, at the instance of various correspondents, I propose to devote some space to a consideration of the various routes which have been proposed, taking as the basis of my observations a recent report of Admiral Amman, of the United States Nary.* I do this the more readily as a consideration of the rou'es crystallises, as it were, into a short space the generalised ideas of the elevation and general orography of the isthmus.

For the last five years, and especially the last two, the Ameriean newspapers have been filled with voluminous letters from Central America, written by correspondents accompanying some one or other of the Government exploring expeditions surveying the Panama region. By these means high hopes of success in diggiug a practicable canal across the isthmus have been from time to time excited; for the heralds of every surveying party that has gone out have announced grand assurances of success then and there. Those who are looking with most hopes to this highway of traffie do so because they believe that a canal there is of vital importance to trade, both domestic and European. They reckon-on the data of 1870 , that is-that the trade of the United States with the west coasts of Mexico, Central and South America, Hawaii, California, British and Duteh Indies, China, and Japan, amounts to fully $1,000,000$ tons; that of Great Britain in the same regions to over $1,600,000$ tons; and that of France and Germany to some 300,000 tons. That is, they reckon on about $3,000,000$ tonnage annually, as soon as a

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ship canal shall be opened across Darien; and that new channels of trade and production would be developed by the current flowing through the grand thoroughfare.

Not only the United States, but also the English and Freneh Governments, and private parties in England, France, and America are agitating on this question. But the enterprise is yet far from completion. In January, 1875, the Nicaraguan Minister to Great Britain, and the Consul-General of Niearagua in France, addressed a communiention to M. de Lesseps asking his interest in the Darien Canal, and tendering assurances of "the surest and most constant protection" to the enterprise by the President of the Republic of Niearagun; and the hero of the Suez Canal replied encouragingly. He had already submitted to the Government of the United States his views on "the best solution of the problem of an interoceanic canal without weirs by the alimentation of the two seas, the same as nature and art have permitted to do for the Isthmus of Suez; but," he added, " in the impossibility to obtain such a resnlt in one of the American isthmuses, I consider the project of the canal of Nicaragua is that which offers the greatest facility of execution and the greatest security as to the result." This appears to have been tho initiation of the latest French movement. The agitation for a canal dates beyond the administration of Mr. Jefferson, who direeted attention to it very early in the century. In 1835, again, an elaborate report on the subject was sulmitted to the House of Representatives.*

In 1851, and sulsequently, Great Britain and France both made important explorations in regard to the canal; $\dagger$ but it was not until 1870 that the American Government undertook some important surveys, which we may now glance at. Without stopping to detail the results of an instrumental examination of whot is known as the Truando ronte, made in 1850 and 1857 by Lieutenants Miehler and Craven, who reckoned a tunnel of 12,250 feet neeessary, and estimated the cost of the canal at $134,000,000$ dollars, we come down to 1870 . There have been ten sinee the beginning of that year.

Yet all this work has given us no final result. M. de Lesseps last year saw, and Commodore Amman this year does not disguise the fact, that nothing positive has been aecomplished, although several negatives have been well established; the data on hand are insuffieient ; and those which are available are flagrantly contradictory. The routes thus far in some way surveyed, explored, reconnoitred, or examined, are eleven, and may be briefly summarised as follows :-
(1.) The Tehuantepec. This route, commeneing at the River Coatzacualeos in the Atlantic wonld require a canal of 144 miles, with 140 locks, and is considered the worst of all the practicalle routes. Yet it has ever been a favourite one with the Spaniards, who have more than once surveyed it, and estimated the lowest cost of construction at $£ 3,400,000$. But this was Don José De Garay's estimate in 1842, and since that r.ate the expense of such work must have nearly doubled-even in Central Ameriea. The project of cutting such a canal

[^3]$\dagger$ By Lloyd, Garella, Gisborne, Prevost, Belli, Wheelwright, Hellert, Baily, Pim, Depuydt, and many others.
from sea to sea was probably first mooted by Saavedra, the kinsman and companion of Hernando Cortes, the eonqueror of Mexico, and so strongly did Cortes believe in the project that he is said to have selected land in the neighbourhood of the proposed route as his portion of the country which be had conquered. (2.) The Niearagua. This is the route of which the fullest reports lave been published, and is, after all, the best one. Commodore Amman describes it as having " a summit of $107 \cdot 6$ feet ; length of canal requiring excavation 61.75 English miles ; slaek water navigation, by means of dams in the bed of the San Juan river, from the mouth of the San Carlos to Lake Niearagua, a distance of 63 miles; lake navigation for 56.5 miles to Virgin Bay, and thence via the valleys of the Rio del Medio and Rio Grande to Brito." The route requires four dams, having au average height of $29 \cdot 5$ feet, and an aggregate length of 1,320 yards, and of twenty locks of an average lift of $10 \div 28$ feet. It has also been proposed to avoid the San Juan altogether, and intersect the forest country straight from the lake on to Blewfields, the eapital of the Mosquito territory.* This was also the route which the late Emperor Napoleon III., even when a prisouer in Ham, in 1810, advocated, and that on which, seven years later, he published a pamphlet. The great attraction of the route is the Lake of Niearagua, ninety-five miles long, and at its broadest thirty-five miles, with an average depth of fifteen fathoms. The lake is navigable for ships of the highest class down to the point where the San Juan flows out of it; and, independently of the aid which the presence of the lake would give this great stretch of water, affording access to towns north and south of it, would be an irresistible recommendation for its utilisation. (3.) The Panama. This is just now, as the Nicaragua was formerly, the favourite route with the United States Government. There are, however, various rival lines across the isthmus. For instanee, Louis Philippe's administration advocated a route from the little Bay of Vaea del Monte, near Panama, to Limon Bay, on the Atlantic. There is also a short route from Chiriqui Lagoon, a fine Atlantic harbour, to the mouth of the David river, whieh is nevertheless impracticable on account of the want of a harbour at the latter point. (4.) The route from San Blas to Chepo was long a favourite, mainly because the distance to be cut through was but thirty miles. But this route has been now almost definitely abandoned, it being seen that it is impractieable even with a tumnel of eight miles. (5.) Humboldt's great name has been used in advocaey of the true line for a canal, being from Caledonia Bay to the Gulf of San Miguel, or else to go further east, and conneet the rivers Atrato and San Juan of Grenada. The Caledonia route from the bay of that name to the Monte and Sucubte rivers is still unsettled. The greatest elevation from the southern end of the bay is 1,259 feet, and from the northern end 1,148 feet. No elevation under 1,000 feet was discovered. (6.) The Depuydt route was first examined by a Freneh gentlemen of that name. At the distanee of thirty miles he reached an elevation 638 feet, and the divile of water still ahead of him. The salient point in this route was that the Atrato river was to be comnected with the Teyter by way of the Tanela river. $\dagger$ (7.) The Atrato-Tuyra. This is the ronte over which there has been so mueh wrangling between the French. and American surveyors. Hellert, La Charme, and Gorgorza appear to have made this, or nearly this, the line of their surveys, if surveys they should be called. Captain Selfridge in 1871 fourd two crossings of the divide, one 712 feet and the other about

[^4]companion of in the project e as his portion te of which the mman describes 61.75 English river, from the igation for 56.5 rande to Brito." ggregate length o been proposed from the lake. route which the ed, and that on of the route is five miles, with he highest class of the aid which access to towns ation. (3.) The with the United is. For instance, del Monte, near Chiriqui Lagoon, impracticable on an Blas to Chepo airty miles. But ; is impracticable used in advocacy Miguel, or else to te Caledonia route d. The greatest n end 1,148 feet. as first examined ached an elevation in this route was the Tanela river. $\dagger$ much wrangling orgorza appear to - should be called. nd the other about


FNDLOHING A TROPICAL EOHEST.

400 feet high; but Gorgorza denies that Selfridge was on the same route. The latter's exploration was sufficient to prove that this is an exceeaingly difficult, if not an impracticable, line, on account of high bills on the Pacific side and extensive swamps on the Atlantic side. The regular line is by way of the Atrato and the Perauchita rivers on the east, and of the Tuyra and the Cué rivers on the west. Some years ago it was estimated that a canal by this route would cost $£ 30,000,000$. (8.) The Truando route we need only mention in order to say that it was pronounced impracticable more than twenty years ago, and this verdict has never been reversed. (9.) The Atrato-Napipi route and (10) the Corgorza we know little about, though the first has been twice surveyed, and if M. Gorgorza is right that his line of travel was different from Mr. Selfridge's, then the former gentleman must be credited with having explored, chiefly from the deck of a French steamer, a route that nobody has been so fortunate as yet to strike again. (11.) The last route which I shall refer to is the one surveyed by Lieutenant Wyse for the Colombian Government. His report just reaches me as I write. He proposes to cut across the Isthmus of Darien by way of the Tuyra river, which flows into the Gulf of San Miguel. Two routes were suggested by the expedition; one by way of the Paya river (a tributary of the Tuyra) and the Caquirri, where the watershed between the two streams is only $\approx 50$ yards long, but its height is 150 yards above low water. The other route Lieutenant Wyse considers more practicable. It lies more to the north, along the valley of the Tupisa, and the furthest point reached by the expedition was thirty-four yards above sea-level, and much closer to the Atlantic than any place of corresponding height on the alternative route. This route is in some respects similar to the various Atrato ones already described, though it differs in part of the proposed course being entirely new. With ordinary energy and perseverance the construction of a canal across Nicaraguan or Colombian territory may be looked upon as a certainty.

## CHAPTER II.

## Cevtral America: Its Political Divisions.

When the Central American States broke loose from Spain, they wisely formed themselves into a federal union of five States, each having an executive Government, a Legislative Assembly, elected at intervals, and a constitution peculiar to itself for its internal management. This nation was ruled by a Presideit, a Senate, and a Federal Congress, and so continued from 1821 to 1839. But in that year, after many bickerings, the Republic of Central America broke up into its component elements. "A change was supposed necessary," as one of their historians naively remarks, and so the union was dissolved, and notwithstanding various attempts to again reconstitute it, so continues at the date of writing, the five republies being practically the five Provinces or Intendencies of the Captain-Generalcy or Kingdom of Guaterada, viz., Guatemala, Honduras, San Salvador, Nicaragua, and Costa Rica.

## Guatemala.

This republic contains an area of about 40,776 square miles, and forms a rough quadrangle. Most of the suriacs is mountainous, the main chain of mountains, already referred to (p. 3),
he latter's practicable, e Atlantic e east, and pat a canal on in order his verdict a we know hat his line edited with $y$ has been is the one hehes me as river, which one by way hed between water. The north, along thirty-four ading height Atrato ones ntirely new. caraguan or
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known as the Sierra Madre, sending off several branches in the direction of the Atlantic, thus enclosing several valleys, but few plains of any extent. Along the principal range (which rises to a height of 13,000 feet), or in spurs closely connected with it, are several rather remarkable summits, termed in the language of the country volcans, or volcanoes; only two of them, Lowever, nameiy, those called De Fuego and Atitlan, giving any signs of activity. Many streams water the State, one of whieh, the Motagua, is navigable for a considerable distance. During the rainy season it carries a great volume of water to the sea, but in the dry montlis, according to Baily, it may be forded in almost every part, that is, for forty-five or sixty miles above its mouth; from Gualan downwards it runs through lands almost uninhabited, and for this distance-ninety miles-it is revigable for small decked boats. The Polochic is another river of much the same nature; it may be navigated by boats to about ninety miles from the city of Guatemala. Both the rivers could be improved, but in the present state of affairs this prospeet is rather hopeless. Of the lakes, that of the Gulf of Dolee, Lake Peten-on an island in which the town of Flores stands-the Lake of Atitlan, and the Lake of Amatitan. Guatemala, Solola, Quesaltenango, Old Guatemala, Totonicapan, Salama, and Chiquimula are the capitals of the seven departments or corregimientos into whieh the republic is divided. But there are a number of other considerable villages, towns, or cities, as they would be called. In 1872-the last census-the total population was returned at $1,190,754$, of whom 360,608 were classed as whites, and 830,146 as Indiaus. The army comprises 3,200 regular soldiers, and 13,000 militia. Its estimated revenue was, in $1875, £ 517,605$, and its estimated expenditure in the same year $£ 556,223$; its public debt was at the same date $£ 2,450,000$, and at this time we may safely calculate that it is not less, the moral from all of which is that Guatemala is in a financially unwholesome condition. In 1873 the total value of the exports, chiefly sugar, coffee, cochineal, mahogany, sarsaparilla, tobacco, and fruits, was given at $£ 672,612$, while the imports are rated at $£ 472,553$. There are no railways in the State, and the latest returns mention that twenty-three ships, in addition to several monthly steamers, entered in twelve months at San José. Everywhere in Guatemala, and, indeed, throughout Central America, there are evident signs of tremendous earthquakes having taken place. Long, deep perpendicular rents occur at frequent iutervals traversing the plains for several miles in length, and often, according to a recent traveller, Captain Lindesay Brine, exceeding 1,500 feet in depth. There are also oceasionally to be met with large, deep, natural pits, not dissimilar to the south of Western America, or the depressions which made their appearance in the State of Missouri, particularly in the neighbourhood of St. Louis, after the earthquake at New Madrid in 1812. Earthquakes are, however, becoming less frequent, and since 1773, when the ancient city of Guatemala was destroyed, there has been no serious shock. There is a singular circumstance connected with an earlier destruction of this eity which has never been properly explained, though so curious that it deserves notice. The ancient capital was situated between two large voleanoes, one was known as Volcan de Agua (or water), the other, which we have alrerdy mentioned, as the Volcan de Fuego (or fire). The former, about 14,000 feet high, was supposed to be extinct; the latter which is above 15,000 teet high, was then, as now, occasionally active. In September, 1541, the Volcan de Fuego shuwed signs of activity, but though the inhabitants were apprehensive of the safety of their houses, yet nothing unusual was expected, and there was no immediate
loss of life. But in the middle of the night of the 11th the extinet Volean de Agua began to give signs of being in labour, and suddenly there poured down from the summit, or upper slopes of the mountain, a vast torrent of water, which, rushing down with irresistible velocity, swept the greater part of the city into utter ruin, and drowned thousands of the iuhabitants. The most probable explanation of this catastrophe is, that a small lake or a considerable

ancient idol and altar at copan, gitatemita.
volume of water had been lying dormant in the crater, and that this beeame suddenly thrown out by some subterranean action of upheaval.*

Travelling from the Pacifie seaport of San José for thirty miles after quitting the coast, the road leads through dense forests of tropical vegetation peculiar to the low-lying Tierras Calientes, or hot lands, the country between the Cordilleras and the sea is called. We then ascend and finally enter the city of Guatemata, which is built on a broad table-land 4,000 feet above the sea, and seventy miles Irom the coast. No longer is the vegetation so profuse

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ing the coast, -lying Ticirras s called. We he-land 4,000 on so profuse
as on the lowlands. The neople have also changed. On the lowlands the Sambos, or mixture between the negro and Judian, prevail. They are physically strong though morally weak, and have all the African's love of ease and heat, both of which requisites can be found among the palms and plantains where they eleet to build their frail, airy dwellings. Yet the two most remarkable men which Central Ameriea has produced since the revolution, mamely, President Carrera and Serapio Cruz, have both belonged to these generally despised mongrels. On the eastern slopes of the Cordilleras the inhabitants are usually pure Indians,

view of the valley of the polochic, department (on comegmifero) of vfha-pat, gicatfmit
but not invariably of the aboriginal stock, many of them being descendants of the Aztec and Tlaxcalan Mexican Indians (Vol. II., p. 235), whom the Spanish generals brought as allies on their invading exeursions. "It is only in the interior," writes Captain Brine, "in the seeluded valleys among the monntains, and in the districts adjacent to the ancient ruined cities, that the descendants of the original Toltecan race are to be found : and these ean be traeed partly by language, partly from a peculiar type of fatures, lant chicfly by the wonderful persistency with which they retain certain ancient superstitions and certain honsehold usages; there is quite sufficient evidence to enable it to be clearly assumed that the deseendants of those advanced races which built the fortresses and mounds of the interior are still existing in their neighbourhood." These ruined cities we may speak of by-and-by.

The soil in Guatemala is as fertile as it is all through these favoured lands of the sun, and its varied climate allows of an immense variety of products being grown. Maize, wheat, rice, tropical fruits, legumes, all European garden plants, cacao, sugar, tobacco, coffee, cotton, and the mulberry on which the silk-worm feeds may be classed among the common products of the country. Were the Indian better acquainted with horticulture he might bring many of the plants to an enviable state of perfection. About the coast towns the description of the negro gardens in Jamaica might apply, the plants and other surroundings being similar. "Outside," writes the author whom I have already quoted (Vol. II., p. 310), " animal refuse is stored in some hollow where liquid permanently rests, as likely as not to the windward of the dwelling. The site is probably a hole in the ground, not unfrequently a swamp several feet bclow the adjoining road. The wretched hovel is crowded with males and females of all ages, not to speak of pigs, fowls, goats, and dogs; and as the sexes have no means of separation, the social consequences may be easily imagined. The only labour which is checrully performed by the negro is that which he bestows on his own 'provisionground.' Of these 'grounds' each negro has at least one, varying in extent from half an acre to two or three acres. Out of this he supports himself and his family, pays his taxes, and obtains his food. Like the 'plant-a-cruive' of the Shetland peasant, the negro's ground is often at some distance from his home. It is often some picce of waste or 'ruinate' land, which he leases from year to year from a neighbouring proprietor. A provision-ground in full cultivation-' when it a-bloom,' as the negroes call it-is a very picturesque sight indeed. Within a roughly-made bamboo or timber fence rise long rows of yams, twining their graceful leaves round poles eight, ten, and twelve feet high. Between these spring lines of Indian corn (maize) and broad-leafed cocoas (Cocolabia esculenta, a coarse yam), and the ochro (Hiliscus esculentus) with its delicate yellow flower. Pumpkins trail along the ground. Knubbly cabbages raise their bullet heads. Pears and pulse of all kinds, the 'Red Miss Kelly,' and the 'Black Betty,' the 'Cockle's Increase,' and 'Sorrow for Poor,' crowd up all the available space. Clustering over an old orange-tree, which in process of time it will utterly destroy, is a handsome cho-cho vine (Scchium edule), whose pear-like fruit is one of the most useful vegetables of the tropics; and in one corner is a little patcb cassava (Jatropha mauihot), from which the negro gets his starch, his tapioca, and his beal, and from whose poisonous root is extracted the well-known cassarep, the foundation of all our sauces." And to this close by may be the palmetto palm, with which the negroes thatch their huts, and the leaves of which they also use as parasols on their journeys. The higher districts will also be sure to have the mountain cablage (Areca olcracea), a graceful palm often 150 feet high. Its bud is perhaps one of the most delicate vegetables of the tropies, though the taking of the "cabbage" kills the tree. The roads in the same districts will be bordered with fences of the Barbadoes Pride (Poinciana pulcher-rima)-the "doodle-doo" of the negroes-while over its pea-covered stems twines the liquorice vine (Abrus precatorius), the scarlet and black spotted seeds of which (John Crow or Jumby beads) are well known in Europe as the beads of necklaces. Here also trails the Circassian bean (Andenanthera paronina), whose seeds East Indian jewellers use as weights, the Jerusalem thorn, and the sea-side grape tree (Coccoloba urifera), the wood of which is well suited for wood engraving, while the fruit makes even better tarts. In the highlands-say
he sun, and aize, wheat, ffee, cotton, hon products bring many prion of the ing similar. mal refuse is e windward wamp several emales of all mo means of ur which is ' provision. at from half aily, pays his $t$, the negro's of waste or roprietor. A it-is a very ise long rows ve feet high. as (Cocolalia yellow flower.

Pears and Increase,' and ige-tree, which edule), whose ne corner is a ch, his tapioca, cassarep, the lm, with which as parasols on cabbage (Areca most delicate
The roads in nciana pulchertes the liquorice Jrow or Jumby s the Circassian ghts, the Jern-- which is well highlands-say
among the Manchester mountains-as, indeed, almost everywhere, the bumming-birds flit about among the trumpet-shaped flowers of the Portlandia, the scarlet blossoms of the shocblack flower (Hiliscus), or the full clusters of the lilacs. Rich orehids seent the air, chief among which is the Holy Ghost plant, with its white petals covering the snowy dove within. The wax plant trails over window-frames, the spider orchid over the guava trees, and the honeysuckle on the pillars of the piazza. Jessamines and frangipanes perfume every room, and the most common bouquet is formed of stephanotis and heliotropes, of gigantic lilies, lovely to look on and pleasant to seent, of clove-seented carnations, and Martinique roses. In the garden may be seen loquat and bread-fruit trees, and the magenta blossoms of the Tahiti apple (Spondias dulcis), while close by are the handsome star-apple trees (Chrysophyllum Cainito), with their quivering leaves, green on the upper, bronze on the lower surface, justifying the eynical negro proverb, which declares that a woman is "deceitful, like a starapple leaf." The famous avocado, or alligator pear (Persea gratissima), is sure to be seen. It is eaten with salt fish, and is an excellent substitute for butter.* An irascible old planter was on the point of dismissing his bookkeeper because during the pear season he ate butter with his bread. "For a man who can do that," he growled, "upon the wages I give him, camnot possibly be honest." The negro watches the progress of his 'provisions' with a careful eye through all their various stages of 'growth' (sprouting), 'blossoming,' 'fitting,' 'fitness,' and 'ripeness.' Still we are afraid that much of his labour in his field consists of lying under a tree with a 'junky' (cutty) pipe in bis mouth, indulging in Turklike keyf, and dreamily gloating over his rising crops. The food of the negro chicfly consists of 'bread-kind' and 'salt provisions.' The former embraces yams, plantains, bananas, cocoas, bread-fruit, and sweet potatoes; the latter includes salt pork, salt cod, ling, herring, and mackerel; vegetables are chiefly used as ingredients in a pepper-pot. Stewed cat is considered a dainty dish among these woolly-headed epicures. The lakourers on the sugar estates, both coolie and creole, hunt and eat the large rats which infest the cane-fields," and parrots are also largely consumed by the negroes, who say they resemble pigeons in flavour.

In Guatemala, as in all Spanish-American countries, owing to the original conditions of the settlement (Vol. II., p. 280), private individuals often hold great tracts of land; still there is much unoccupied ground in the tierras valdias, so called, which is, however, for the most part utterly waste, a condition in which-so far as cultivation goes-much of the appropriated land is. The sparseness of the population (searcely twenty-four to the square mile) is no doubt one of the causes of this, but the great fertility of the soil, and the consequent inducement to indolence and idleness, without any neutralising stimulus to ambition and industry, are also to be blamed for much of the backward state of this, as of all tropical countries. Spanish-American countries also seem unfortunate in attracting little or no immigration. But in reality this is greatly owing to the jealousy of foreigners, which has grown up in all the old Spanish colonies from the time when, by the old Royal laws, no strangers were permitted to trade with the

[^6]Indies. Indecd, it seems characteristic of these countries that when they gained their freedom, they retained, as a result of the narrow-minded short-sighted prejudices among which they had grown up, some of the worst features of the former réyime. Want of public spirit and ignorance of the elementary laws of political economy pervade every department of the Central American governments: it is no use particularising one over the other-they are all much about the same. The cochineal insect was introduced in Guatemala in 1811, and its nurture and collection now form one of the chief industries of the country. It is fed upon the "nopal" (Opuntia Tuna, as well as Nopulea coccinellifera), which grows to perfection in the volcanic country, where the soil is so dry and unstable that volcanic matter and sheets of hot water exist at a depth below the surface so small that in some places a temperature of $212^{\circ}$ Fahr: is realised by digging down only a few feet. Jets of steam are constantly issuing from these furnaces, and become visible after sunset, filling the valley with smoke. Such a valley is that of Amatitlan, west of Guatemala, which constitutes the centre of the cochincal cultivation. There the insects feed on the cactus, and soon grows fat. They are then swept off into trays, and thrown on hot plates, the newly hatched young being, however, prescrved for the next crop. The inseet thus artificially shrivelled up is then put into water, and gives out the well-known cochineal dye of commerce. Cereus Dyckii (Plate XXI.) flourishes equally well, and in some places forms extensive thickets.

It is, however, in the tierra templada-the high alluvial plains-that the Guatemalian is seen to best advantage. As the lagoons, savannas, and great forests of the low hot lands disappear, the atmosphere, as M. Morelet remarks, becomes fresh and pure, the population more compact, the ties which bind society together more numerous, and man appears to have recovered in a large degree the energy and activity of other regions. He there displays greater industry, more forethought, and is less averse to labour. "His domain is more extended than in higher and in lower grounds, his efforts better appreciated, and he no longer sustains an unequal contest with Nature, but subdues and binds her to his will." In this part of the country, also, venomous reptiles are rarer than in the low land, where they are by no means uncommon. The poisonous Trigonoceplatus is one of the most dangerous of snakes, while the boa, though not venomous, is yet dreaded for its strength and activity. The rattle-snake (Crotalus horrilus) is also common in dry ground, though it is not regarded with anything like the horror which attaches to the perfectly harmless, though hideous geeko (Gymnondactylus scapularis), which basks on sunny walls, and is universally believed to inflict a bite which is incurable!

In the cool region are found the most beautiful flowers, which seent the air with their odour. Here flourish the amaryllis, the helianthius, the wood-sorrel, the Indian pinks, endless varieties of penstemons and tree ferns, while the clematis and ipomæa festoon the wood, and the glycine enlaces the wayside trees. A plain on which the village of Taltick is built is so cool that the inhabitants style it a tierra helanda, or frozen land. In December there is often hoar frost, and even now and then a slight fall of snow. Yet here also the banana flourishes, a sure sign that the temperature does not as a rule fall very low.
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Want of rvale every ng one over introduced chief indusas Nopalea oil is so dry v the surface g down only ecome visible tlan, west of inseets feed d thrown on crop. The e well-known well, and in
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the air with the Indian and ipomæa on which the larla, or frozen slight fall of ture does not


A VIEW ON THE SPANISH MAIN.

The modern city of Guatemala is situated in the centre of a plain which abounds with earthworks and tumuli, the work of a people of former times. New Guatemaia is,
however, removed thirty miles from the volcanoes, though Antiqua Guatemale-the old capital-still stands, but its cathedral and houses are rent by the earthquakes which have visited them. Most of the inhabitants are of mixed descent, though there are a few deseendants of the old Spanish families, and a small European Society, formed by the diplomatic corps, and the coffee planters and their agents. The Indians are, however, the hewers of wood and drawers of tobaceo. In early morning they may be seen thronging the roads, carrying great burdens by means of bonds or straps passed round their foreheads. In the days before the Conguest there were no beasts of burden; hence all loads had to be carried in this manner. Yet, though there is now an abundance of mules in the country, such is the force of habit that the Indians never use them, but bear their burlens, as did their fathers, on their own backs. Contrary, also, to what obtains among the Northern Indians, the wome: only carry water and grind the corn, the men doing all the hard toil. The capital of Guatemala-the city of the same name, the Quautemalan of the Indians-is not an inviting place of residence. It is poor, and the people are unsympathising and suspicious of all who appear inclined to share their very moderate wealth. As the houses are low, the traveller who approaches it sees from a distance only a " monotonous succession of roofs, relieved here and there by the domes and clock towers of the churches. An air of solitude and abandonment pervades its environs; there are no gardens, no plautations, no country houses, nor any of those industrial establishments which throng the approaches to our capitals. The houses of the suburbs are mere huts, covered with thatch, and separated from each other by bedges or open spaces of ground. Proceeding further, the traveller finds broad streets all laid out with the severest regularity, which prevails equally in the architecture of the houses. As a precaution against earthquakes, their height is limited to twenty feet, and they are therefore reduced to a single ground floor. Their fronts are without ornament, but sometimes are bordered by a narrow side walk, which gives a momentary relief to the pedestrian from the detestable pavement of the streets, composed of stones, rough, angular, and badly laid down." Like all Spanish towns it is crowded with churches, including a cathedral, which might at one time lave been rather imposing, but has now fallen much from its ancient grandeur. It contains some rather well-exceuted wooden statues of saints, and some indifferent paintings, for in the old Spanish days the patronage of the Goverument maintained here a school of artists devoted to ecclesiastical works of this deseription. Nowadays, from want of patrons, this secluded school has died away, and even the goldsmith's art, for which Guatemala was once celebrated, has sunk to the lowest ebb. The charch contains-or did contain-a large tasteful lamp of silver, but the other sacred vessels, and the six great golden candlesticks -each upwards of three feet in height-have long ago disappeared. Four were stolen by a private individual, whose sacrilegions name is unknown, and the other two were melted down by the State under the excuse of "public necessity." The cemetery of Guatemala is like that of most Spanish countries. The dead are "buried"-if the phrase may be used-in niches in the high walls of the cemetery. In these compartments the coffins are placed, and the mouths plastered up, a black lozenge being painted on the outside for the reception of any inscription, so that, it has been remarked, the wall resembles the display of multitudinous packs of cards. At the end of every ten years the fosse
le-the old which have are a few med by the however, the thronging their forecee all loads of mules in It bear their tains among en doing all Quantemalan ople are unerate wealth. ance only a clock towers there are no stablishments e mere liuts, s of ground. st regularity, gainst earthd to a single by a narrow ble pavement :e all Spanish ae time have It contains rings, for in ool of artists patrons, this uatemala was tain-a large candlesticks were stolen 2er two were ery of Guatee phrase may ats the coffins n the outside vall resembles ears the fosse
for the common dead is cleared out for the reception of new occupants, and the bones are piled up in pyramids in the corner of this hideous golgotha. The only feature at all pleasant about Spanish burying-grounds is that children are interred with music, the relatives, whatever may be their real feelings, always affecting to feel glad that the little one has so soon gone to rest. Yet Guatemala is a gloomy town, and one in whieh the stranger, by every account, speedily gets overpowered by cnuni of the most consuming deseription. The people go early to bed, and get up late; by 8 p.m. the streets seem deserted, and the traffic-such as it is-is not resumed much before 10 next day. In the interval the slecpy screnos (Vol. II., p. 293) have it all their own way; but even these incompetent watchmen are an institution of comparatively recent times, previous to which the streets after dark were safe neither for life nor limb. Of course there is a plaza, and in the plaza there is a market, this market, or rather the colleetion of Indians who frequent it, being really the most interesting sight in the whole city. M. Morelet's description of the seene is so graphic, that as a condensed view of Guatemalian life I may extract it :-"The market is well supplied with vegetables, collected, it is truc, from places not distant, yet possessing different climates, and the fruits of Europe, few in number, and of inferior quality, are confounded with those of Amcrica to sueh a degrec, indeed, that the vendors themselves are ignorant of their origin. Seattered at intervals are little shops, where the Indians gather to obtain a cheap meal. They first lay in a stock of tortillas, which are sold separately, and then hand in their porringer or calabash to be filled. For a cuartillo (three cents) they are furnished with a thiek red soup called pulique, composed of maize, pepper, and fragments of tortillas. Nothing can be less tempting than this national dish; indeed, the gencral manner of serving repasts in these Indian restaurants is revolting in the extreme. Overtaken one day by a heavy shower, which obliged me to seek shelter under one of the galleries of the plaza, I employed the leisure moments in watehing the economy of these establishments. The one nearest me was kept by an old mulatrcss, squatting like a monkey beside a furnace which supported three earthen jars. When a eustomer presented himself, she drew from a basket near by a large plantain leaf, plunged her wrinkled hand into one of the earthen vessels, and took out a quantity of the steaming contents, which she spread over the leaf, then she added a layer of beans, and finally the same hand, still dripping, disappeared in the third jar, and came out of a charming orange colour, for it now contained the pulique, and whieh gives to the customer's dish the culminating touch of perfection. Here and there huge parasols, covered with palm leaves, shade the bouths, where are sold syrup, tiste, and other refreshing or tonic beverages. In the distance those naked, copper-coloured men, who are seated on the chureh steps, apart from the movements and seductions of the place, are the Indians of the tierras calientes, resembling a floek of migratory birds. They are resting themselves, while making their simple breakfast on an ear of maize. This group, close at hand, is made up of Sambos, a strange type of men, of whom we have already spoken, and who are easily recognised by their sooty colour, their brilliant eyes, and their crispy hair. They are bloodthirsty in disposition, and wholly destitute of honour, morality, or principle. The inhabitants of Palin and Jocotenango are easily distinguished by their white cotton drawers, which do not reach the knee, a peculiar costume, derived by their ancestors from
the conquerors, to whom it was probably trunsmitted by the Moors. Here lounge the ladinos, under the shalow of the arcades, veritable lazadroni, regaling themselves with boxes of sweetmeats. They have fuished their day's labour, and ure rapidly consuming its prodacts; nor will they return to work until driven to it by necessity. And, lastly, those men with round jackets, who so carefully close their shops and barricule them within; they are the true eitizens of the place, and the rnstie simplieity of their enstoms mad manners is not to be mistaken as belonging to the republican character, for they are fill of aristoeratic vanity, and feel deeply womaded if, when addressed, the title which they have seen fit to prefix to their name is omitted." If we are to take our opinions from M. Morelet, and he understood the country and its inhabitants better than some modern travellers, the Guatemalians are not a pleasant people. The women have little edneation, and feeling their deficieney, generally avoid the society of Luropean ladies; the men aro selfish, intensely suspicious, bound up in their petty interests and momastic squabbles, and though like all the Spanish race, full of high-flown compliments, and ever hegring that the stranger will consider their honour, credit, and fortmes at their disposal, would be rather sulky if their offers were taken to mean more than a glass of water, or at most a cigar. Onee the priests ruled all in Guatemala, but though they still maintain a considerable hold on the State, their power has been gradually deereasing, cutil by the last constitution of the State they are prohibited from taking any active part in the government. The people, in a word, do not live, they vegetate. Morality is at a low stand, as might a: expected in a country where for three hundred years the highest offices of State were put up to auction, where money was all in all, and merit nowhere, where the eustom-house officers can to this day be "arranged" with, where the judges sold and still sell judgments, but not justice, and where the clergy ly their greed and immorality bring religion into contempt. Guatemala is yet, as ever it was, the prey of ruffianly politieians, the most terrible of whom was Rafael Carrera, whom I bave already referred to ( p .17 ), a Sambo, sprung from the lowest depth, fieree, cunning, unscrupulous, but yet a master of all the men who demeaned themselves before him, and endeavoured to make him their tool. The terrible coudition of the country may be inferred from the faet that from 1812 to 1842 no less than fifty-two battles were fought in Guatemala, while the aggregates for all the five States of the Confederation during that period were 143 battles-none of them very bloody, it may be allowed-but in the warfare of Central American polities probably more men have fallen by assassination and by military and political excentions than in the field, where the dead during the period mentioned numbered 7,088 , and the wounded 1,785 . All over Guatemala are numerous ruined "eities," the work of the ancient Indians before they sank into their present condition by the oppression and barbarism of the conquerors. These eities, now lying hidden in jungles, seem at one time to have been densely peopled. A powerfui priesthood oceupied the numerous temples, a fixed and mild form of government was established, the people were employed in agrieulture or State labour, methods of symbolic language were in course of construction and improvement, and bieroglyphics were in use to express astronomical data, and the prineipal meteorological and political events. It is probable that the arehitects of the mounds of the Mississippi and Ohio Valleys were of the same race as those who reared the mound now found
lounge the selves with consuming And, lastly, ricude them heir eustoms for they are which they pinions from ome modern le elueation, the men are de squabiles, ver legging cir disposal, ss of water, h they still deereasing, $y$ active part rality is at a the highest erit nowhere, e the juiges ir greed and the prey of ready referred as, but yet a ake him their from 181: to tes for all the f them very robably more than in the the wounded the ancient nd barbarism to have been sed and mild ure or Statt rovement, and meteorologrieal e Mississippi $s$ now found
in Guatemala, many of the artieles found there being identical with those disinterred from similar mounds or refuse heaps in North Ameriea. It is curious that these ruined eities of Central Amerrea should be found only in a limited area, and should be evidently the work of one particular and exeeptionally eivilised race of Iudians. None exist in South Amerien, and none in that part of the Continent eommonly called North Americe They all lie within the tropics between the 12 th and 22 nd parallels of north latitude nud are chiefly adjacent to the Mexican and Honduras Gulfs, or in the plains on the

vIEW OF TIE VILI.AOE OF JANSOA, GUATEMALA.
cast of the Corlilleras of Central America. On the western or Paeifie slopes and plateaux, within the same parallels are also remains of aneient fortifieations and saerificial altars, but these are of a less elaborate type, and are allied to the Aztee strueture of Mexico. The arrival of the Spaniards destroyed for ever the chance of the raee who built these cities of Central Ameriea and the corresponding struetures in Mexien from ever becoming one of the influential and eivilised nations of the world.* Some of these struetures are engraved on p. 6, and Vol. II., p. "F:

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## Belize.

Belize, Balize, or British Honduras, is a colony of Great Britain, formed of the south-eastern portion of the Peninsula of Yucatan, and may be described as that portion of Guaternala bordering the shores of the Bay of Honduras. Its area is about 13,500 square miles, and its population in 1870 was 24,710 ( $1 \%, 003$ males and 12,107 females), of whom only 377 were whites. The country is generally flat and swampy on the coast, as is mosi of the neighbouring regions, but towards the interior it rises gradually, the elevation culminating in the table-lands of Guatemala already described. The southern portion is composed of savannas or prairies covered with pines, while the banks of the rivers, such as the itio Hondo, Blue, and the River Siboon-the first two of which-named streams form its northern boundary, and the last one its southern-and the Belize River are covered with mahogany and logwood. Indeed, it was this inne timber which originally attracted adventurers to this colony from Jamaica, soon after it was discovered by Columbus. Tho presenee of the English was long regarded with extreme jealousy by the Spaniards, and theugh in 1670 our territoriai rights were partially acknowledged, yet it was not until 1786 that a formal grait of the settlement was obtained from His Most Catholic Majesty. The population is confined chiefly to the towns and the mahogany cutting establishments on the rivers; one half l:\%e in the capital, Belize, a town of 6,614 inhabitants, situated at the mouth of the river of the same name, which is navigable for 200 miles from its mouth. The forests contain cedar, rosewood, pine, and other good timber, the indiarubber, and the sarsaparilla, agave, indigo, \&c., while along the coast the cocoa-nut and other tropical trees and shrubs flourish. The valleys and plains yield abundant crops of sugar-cane and other tropical products, but the great staple of British Honduras is the mahogany tree (Swietenia malogani), whose vast size and magnificent foliage justly entitle it to be called the king of the forest. It is very slow in growth, hardly undergoing a perceptible increase during the lifetime of a man; hence its extreme firmness. It has been colculater, according to Mr. Squier, that it requires 300 years to attain to a proper growth for cutting. So large does it sometimes become, that the lower section of a tree, 17 feet long, has been known to "square" 5 feet 6 inches, equal to 550 cubie feet, and a weight of seventeen tons. The camps for cutting the mahogany trees are situated as near as possible to the rivers, and like the logging eamps of North America (Vol. I., f. 256) are necessarily temporary, being shifted according to the abundance or scarcity of thrs trees to be chopped down, and floated to the receiving, marking, and slipping establisiments near the mouths of the rivers. The pursuit of the mahogany chopper is a wild but a systematic one. Having fixed on a "location," he brings to the spot a store of provisions, and makes arrangements for securing and embarking the wood on its voyage scaward. Here he keeps a little fleet of pitpans, or canoes, for carrying supplies, and keeping up relations with the "works" proper. Sometimes he is forced to go back a considerable distance from the banks, and then, as in the forests of the north, oxen are used to "truck" the wood to the river. The "camp" is then fixed, a hut, composed of a hammock swung between two posts, and protected from sun and rain by a thatch of palm leaves, forming a hourg sufficient for the purpose. The mahogany season lasts from August to April,
as the wood when cut during these months is not so apt to "check" in seasoning, or split in falling, as during the rest of the year, or what is known as "the spring." The labourers work in gangs of twenty or fifty each, under the direction of a captain, who assigns to them their daily tasks, anu adds to or deducts from their wages in proportion as they accomplish what is considered a fair day's work or not. To each gang is attached a "hunter," whose business it is to scarch for proper trees to cut, and as his work involves greater intelligence and activity than the others, be is paid higher wages. With his machette he cuts his way through the dense forest, until he comes to some elevated situation, when he climbs the highest tree, and minutely surveys the surrounding country. "At this season of the year (August)," writes an eye-witness, "the leaves of the mahogany tree are invariably of a yellowish-reddish hue, and au eye accustomed to this kind of exereise can, at a great distance, discern the places where the wood is most abundant. He now descends, and to such places his steps are at once directed, and, without compass or other guide than what observation bas imprinted on his recollection, he never fails to reack the exact spot at which he aims. On some oceasions no ordnary stratagem is necessary to be resorted to by the huntsman to prevent others from availing themselves of the advantage of his discoveries; for if his steps be traced by those who may be ongaged in the same pursuit, which is a very common thing, all his ingenuity musi be executed to beguile them from the true track. In this, however, he is not always successful, being followed by those who are entirely aware of all the arts he may use, and whose eyes are so quick that the slightest turning of a leaf or the faintest impression of the foot is unerringly perceived. Even the dried leaves which may be strewed upon the ground often help to conduct to the secret spot; and it consequently happens that persons so engaged must frequently undergo the disappointment of finding an advantage they had promised to themselves seized on by others. The hidden treasure being, however, discovered, the next operation is the felling of a sufficient number of trees to employ the gang during the season. The tree is commonly cut about ten or twelve feet from the ground, a stage being erected for the axeman employed in levelling it. This, to an observer, would appear a labour of much danger, but an accident rarely happens to the people engaged in it. The trunk of the tree, from the dimensions of the wood it furrishes, is deemed most valuable; but for purposes of an ornamental kind, the limbs or branehes are generally preferred, their grain being much closer, and the veins richer and more variegated." The next operation is "trueking" the trees cut, but this, as well as the operation of making graded roads, is much the same as that already described in the account of lumbering operations in the north (Vol. I., p. 259), with the exception that instead of the trees being simply dragged along the ground, they are borne on a sort of truck or low carriage, to keep them from rolling off which is the chief reason for them being square. In performing this work, many valuable trees-such as iron-wood, bullet-tree, redwcod, sapodiia, \&c., have to be destroyed, or are thrown away as useless, unless they happen to be near a stream or glen, in which case they are emploved in building bridges. The roads being usually finished by the month of December, the trees are sawn into con-veniently-sized logs, squared, unless they are small, and dragged to the river side. To again quote from the author on whom we have already drawn-"the season may be
termed the mahogany cutter's harvest, as the result of his season's work depends upon a continuance of the dry weather, for a single shower of rain would materially injure his roads. The number of trucks worked is proportioned to the strength of the gang, and the distance generally from six to ten miles. We will, for example, take a gang of forty men, capable of working six trucks, each of which requires seven pair of oxen and two drivers, sisteen to cut food for the cattle, and twelve to load or put the $\log s$ on the carriages, which latter usually take up a temporary residence scmewhere near the main body of the wood, it being too far to go and return each day to the river side or chicf establishment. From the intense heat of the sun the cattle would be unable to work during its influence; consequently, they are obliged to use the night time in lien of the day, the sultry effects of which it becomes requisite to avoid. The loaders, as before mentioned, being now at their stations in the forest, the tracks set off from the emburculero at about six in the evening, and arrive at their different places of loading about eleven or twelve o'elock at night; the loaders, being at the time asleep, are warned of the approach of the trucks by the eracking of the whips carried ly the cattle-drivers, which are heard at a col.siderable distance. They arise, and commence plaeing the logs on the trucks, which is do... by means of a temporary platform laid from the edge of the truck to a sufficient distance from the ground, so as to make an inclined plane, upon which the $\log$ is gradnally pushed up from each end alternately. Having completed their work of loading all the trucks, which may be done in three hours, they again retire to rest till about nine o'elock next morning. The drivers now set out on their return, but their progress is eonsiderably retarded by the lading, and although well provided with torchlight, they are frequently impeded hy suall stumps that remain in the road, and which would be easily avoided in daylight. They are, however, in general all at the river by eleven o'clock :ext morning, when, after throwing their logs into the river, having previously marked them on each end with the owner's initials, the cattle are fed, the drivers retiring to rest until about sunset, when they feed the cattle a second time, and yoke in again. Nothing can present a more extraordinary appearanec than this proeess of trucking or drawing down the mahogany to the river. The six trucks will oecupy an extent of road a quarter of a mile. The uumber of oxen, the drivers half naked (clothes being inconvenient from the heat of the weather and clonds of dust), and each bearing a torchlight, the wildness of the forest seenery, the rattling of the chains, the sound of the whip eehoing through the woods: then all is activity and exertion, so ill-corresponding with the silent hour of midnight, making it wear more the appearance of some theatrical exhibition than what it really is, the pursuit of industry which has fallen to the lot of the Honduras wood-enter. About the end of May the periodical rains again commenec. The torrents of water diseharged from the elouds are so great as to render the roads impassable in the course of a few hou:s, when all trucking ceases, the eattle are turned into the pasture, and the trucks, gear, tools, \&e., are housed. The rain now pours down incessantly till about the middle of June, when the rivars swell to an immense height. The logs then Hoat down a distance of 200 miles, being followed by the gangs in pitpans (a kind of flat-bottomed eanoe), to disencage them from the branches of the overhanging trees, until they are stopped ly a boom placed in some situation convenient to the mouth of the river. Each gang then separates its own
nds upon a y injure his ng, and the ng of forty en and two ogs on the main body chicf estabvork during the day, the mentioned, ro at about n or twelve approach of are heard the trucks, be truck to ppon which leted their in retire to return, but wided with road, and it the river er, having the drivers ie in again. rucking or nt of road convenient ac wildness rrough the midnight, really is, r. About discharged few hou:s, tools, \&ce., when the 200 miles, age them placed in s its own
cuttings by the marks on the end of the logs, and forms them into large rafts, in which state they are brought down to the wharves of the proprietors, when they are taken out of the water and undergo a second process of the axe to make the surface smooth. The ends, which frequently get split and rent by the foree of the current, are also sawed off, when they are ready for shipping."* The wages of the men engaged in this business in both British Honduras and the republic of the same name are about the same. The quotations



HRITISH HARRACKS AT GKANGO W.ILK, RELIZE.
$£ 3, £ 28 \mathrm{~s}$. , and $£ \mathfrak{Z}$, aceording to their rank. The "hunter" for the gang has $£ 3$ per month, or more frequenty bo is paid at from half-a-dollar to a dollar for each tree he finds, according to its size and wita. The men are supplied with tools and rations, or receive their wages in goods and money. In Belize most of the cutters are negrocs, descendants of the former slaves emplcyed in the colony, but in Honduras they are chiefly Caribs, many of whom go to Belize to hire themselves for the season, returning to their homes at the elose. They Li:eet with ready employment, as they are said to excel the negro in activity and strength, and hence make better workmen. The mahogany trade is increasing, nor, for the present, at least, is there any danger of the supply failing, though, owing to the reckless felling without proper supervision or replanting, the cutters have to go further and further every

[^8]year from the great rivers, and by-and-by will have to contend with the difficulties of floating the logs down shallow or broken rivers, and embarking them on an unprotected shore.

In 1875 Belize exported to Great Britain £227,890 worth of products (including 2,300 tons weight of sugar), fustic, dyewoods of many kinds, and, of course, mahogany, cedar, and sarsaparilla. Imports from the United Kingdom were in the same year $£ 125,308$, the annual revenue $£ 40,231$, the expenditure $£ 36,613$, and as the debt in 1877 was only $£ 5,040$, the colony may be said to be solvent and even prosaccus in its own quiet tropical sort of way.* It differs from most colonies whose acquaintan $\epsilon \quad$ "ve made or may have yet to make, in so far that it issues no imaginative yellow-covern amphlet to tont its glories, and keeps in England no agent-general whose duties were long ago described in Talleyrand's definition of an ambassador. It does not profess to have "the finest climate in the world," and though the Belisians would be more than mortal if they did not claim for their colony the merit of baving "boundless riches," they are not particularly anxious for any more immigrants to share them.

## San Salvador.

This is the smallest in size, but in point of popuiation the second largest of the republics which came into existence on the dissolution of the Central American Confederation in 1839, though previous to 1853 it was in federal un'on with Honduras and Nicaragua, and has not unfrequently since been at war with both. It is difficult to be certain at the present moment what is its particular form of government, since for years past "pronunciamientos" bave taken the place of any regular presidential election, and a sort of militarily controlled anarcly prevails. It is about 180 miles in length, by about 40 in breadth, and contains an area of 9,594 square miles, with a population estimated at 600,000 , mostly aborigines or mixed races, as the pure whites do not number more than 10,000 . Several mountain spurs break San Salvador into a number of inland valleys and a low rich belt along the coast. The Central range, or Cordilleras, possesses sixteen volcanic peaks, ranging in height from 4,000 to 7,386 feet. There are also numerous lakes, one of which-Guija-is nearly ninety miles in circumference, and abounds in fish. Five or six miles to the eastward of the city of Sant Salvador is the lake of Ylopango, about nine miles in length, and averaging three miles in breadth. Mr. Baily describes the ground on the north and south sides as very stecp and rugged, while on the eastern and western extremities it is nearly level with the surface of the water. No stream of any consequence falls into it, and its only outlet is the Desaguedero, which flows through a deep, dark, and almost unapproachable ravine, until it empties itself into the Jiboa. The inhabitants believe that the lake is unfathomable. The water when taken up is beautifully pellucid, but it is not accounted wholesome; when ruffled it assumes that colour which the Salvadorians call verde de perico (parrot-green), and exhales a powerful, disagreeable, sulphurous odour, which becomes more intense as the wind increases in strength. When the upper stratum of the water is thus moved, fish are taken in great quantities; at other times, when the lake is still, few can be caught. These fish,

[^9]of floating shore.
ding 2,300 any, cedar, 25,308, the aly $£ 5,040$, ropical sort have yet to its glories, Calleyrand's ate in the m for their us for any
e republics leration in ragua, and the present pronunciamilitarily n breadth, 100, mostly ). Several belt along $r$ in height -is nearly astward of averaging th sides as level with only outlet ble ravine, athomable. me; when rreen), and se as the are taken These fish,
though of indifferent quality, are much esteemed by the inhabitants of San Salvador, owing to their having little acquaintance with any other kinds. This sulphury character of the lake, as well as the numerous mineral springs and other similar subterranean phenomena, are doubtless owing to the intensely volcanic character of the country. The soil is very fertile, but though the people of San Salvador are more addicted to agriculture than most of those of the neighbouring republics, much of the country still lies waste, and pastoral pursuits find little favour. Indigo, sugar, maize, cotton, and coffee arc the chief crops. Along the coast, from Acajutla to La Libertad, the world-famous balsam of Peru, or St. Salvador balsam, is collected in such quantities that the country is known as Costa del Balsamo. The annual export averages from $17,600 \mathrm{lbs}$ to $22,000 \mathrm{lbs}$. It is almost entirely collected by the Indians, who are the chief inhabitants of the districts, and hold no intercourse with the rest of the country except that which is absolutely necessary for carrying on their peculiar trade. Each individual or family collects independently of the others, and, accordingly, the balsam is bought in small quantities by the persons who purchase it for exportation. The trees yielding this commodity are very numerous in this part of the country, and though other regions have the same kind of soil and climate, they do not seem to be favoured with the presence of Myroxylon Pereira. The balsam is collected by being absorbed as it exudes, in pieces of cotton rags inserted in the incisions made for the purpose. These, when thoroughly saturated, are replaced by others, which, as they are removed, are thrown into boiling water. The heat detaches the balsam, which floats, and is skinned off and preserved in calabashes. The wood of the tree is close grained, beautifully veined, nearly of a mahogany colour, and retains its fragrance for a long time. It would then be valuable for cabinet work, but it is rarely to be had, as the trees are never felled until, either through age or decay, they have ceased to yield the resins which gave them their original value. The association of the name of the resin with Peru is due to the fact that in former times, owing to the commercial regulations then existing in Spanish America, the product was sent to Callao, and thence shipped to Spain, leading to the belief in Europe that it was a product of South America; and the few who knew the contrary did not care to enlighten the rest of the world. Though there is no great mineral wealth in San Salvador, yet at Tabanco there are rich veins of silver, and in the west, near Santa Anna, mines of iron. The fine indigo-known in "the trade" as "Guatemala indigo"-is the most valuable staple of the country. The cstimated revenue for 1876 was $£ 447,723$, and the estimated expenditure $£ 430,663$. At present the debt is unknown. In 1875 it was said to excced $£ 872,645$, but as there is also a floating debt of an unknown amount, it is impossible to rightly estimate the indebtedness of the Republic, though, if put at $£ 1,300,000$, San Salvador will not be wronged. In 1874, its imports were estimated at $£ 373,818$, its exports at $£ 721,005$.* The capital is San Salvador, a town of 16,000 inhabitants, which has been frequently destroyed by earthquakes, the last time in 1854, when it contained 30,000 people. Most of the new dwellings were accordingly rebuilt after this catastrophe at Nueva San

[^10]Salvador, not far off, though without gaining much, as in March, 1573, this new capital was also partially destroyed by a series of earthquakes, ended by a simultaneous eruption of the lizalco volcano. Its trade is nov reviving, and is carried on chiefly through $\mathrm{La}_{\mathrm{a}}$ Libertad-the principal port in the republic-which is distant about sixteen miles from the town. In the days before the Conquest, San Salvador was called Cuscatlan-" the land of riches"-and was the best peopled and most civilised of all the American countries

view of hay lislande, honderbas.
whicis had come under the control of the Aztec religion. Conquered by Pedro de Alvarado, one of the companions of Cortes, it became one of the richest portions of the kingdom of Guatemala, until, in 1521, it threw off the Spanish yoke, and joined Mexico. In 1823 it, however, seceded from that republic, and formed the Central American Confederation, in which all of the five confederates were so uncomfortable, that they broke asunder in 1839. Since then it has frequently been at war with its old confederates.

## Honderas.

This republic contains about 39,600 square miles, and is generally mountainous, though containing much good agricultural land. Its mineral wealth is, however, its great resource. Gold, silver, copper, iron, cinnabar, zine, antimony, tin, platinum, opal, amethysts, asbestos, chalk, limestone, marble, and coal are enumerated among its riches, while the soil produces us eruption through La miles from tlan-" the n countries
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mahogany, and other fine timber trees, cotton, sugar, coffee, tobacco, and the usual tropical crops. What the revenue is does not appear, civil war, wars with Guatemala and San Salvador, general anarchy and unconscionable peculation having produced something approaching to chaos. The national income is believed to be about $£ 97,000$, but the expenditure has for several years past exceeded this. At the end of 1876, the foreign debt amounted to something like $£ 5,990,108$ contracted for an interoceanic railway, of which only about fifty-three


MAP OF CENTRAL AMERICA.
miles on the Atlantic side were completed, and are now abandoned, the whole affair being little better than a swindle. In truth, if Honduras ever attempted to pay the interest on its debt-which it does not, and it is not likely ever will-it would amount to an annual charge of $£ 695,700$, or more than seven times the total receipts which the Government can in any way calculate upon! But it is unnecessary renpening these old tales: the "Interoceanic Ship Railway Canal" is a sore subject with the British capitalist, and Honduras a State very prominent in the "Report of the Foreign Loans Committee" of the House of Commons (1875).

The inhabitants of Honduras number about 351,700, but there bas been no regular survey of the country or census of the people, so that the figures given are mere estimates.

There are not many Europeans, or people of European descent, the greater number of the "eitizens" being either Indians or mixed breeds. Some of the towns, like Santa Rosa, in the tobaceo districts, are almost entirely inhabited by whites. The capital-Comayagua(formerly called Valladolid) an ancient town of 7,000 or 8,000 inhabitants, is figured on p. 37. It was founded in 1510 by Alonzo Caecres, in obedience to instructions to find "an eligible situation for a city midway between the oceans." Previous to 1827, it had 18,000 inhabitants, but in that year it was taken and burnt by the monarehial faction in Guatemala-for Central America has even had yearnings after a king-and has never since recovered the shock. It has a languid university and a eathedral, built and decorated after the questionable tasteful style of Spanish ceclesiastical edifices. The eity stands in the middle of a great plain, 2,000 feet above the sea-level, a site which seems, from the remains of towns, fortifications, and similar creations to have been a favourite one with the ancient inhabitants of Honduras. Its exports, which are chiefly mahogany, hides, tobaceo, cattle, and indigo, are estimated to be worth on an average $£ 200,000$ per annum, while the imports, viz.-cotton goods, silk, hardware, \&e. -- cannot be stated with anything like accuraey, the customs of the different ports being farmed out to private individuals, whose interest it is to blindfold the Government and the public generally concerning the trade of the country and their corresponding profits.* The climate varies with the changing elevation, and exposure to the trade and other winds. At the highest elevation oaks and pines and wheat-fields flourish, and in others-as in the plain of Comayaguathe palm and the pine flourish side by side. The climate, even on the coast, is not hotter than, as Mr. Squier points out, New York during the warmest months of the year. Yellow fever is unknown in the interior or on the Pacifie coast. The average range of the thermometer is on the coast about $75^{\circ}$ Fahr.; in the interior, at an elevation of 300 feet, $65^{\circ}$, and there are pol.. 3 where snow has been known to fall in light showers.

## Nicaragla. $\dagger$

The area of this republic, including the Mosquito Territory, is estimated at 58,170 square miles, and the population at 350,000 ; but this is mere guess, as there are no proper census returns to go upon. The only statistical fact we are perfectly sure about in regard to Nicaragua is its debt, which was contracted in this country. This, at the end of 1874 -when the lenders repented them of the error of their ways, and buttoned up their pockets-was estimated at $£ 1,900,000$. The revenue in the same year was about $£ 119,020$, and the expenditure $£ 151,710$, an unhealthy financial condition, which has become chronic in the State, deficits having been the invariable rule since 1865 . The number of people of pure European blood in Nicaragua is small, most of the inhabitants being Indians, Mulattoes, Negroes, and the other mongrel broods who swarm over Central

[^11]number of nta Rosa, ayaguas figured ctions to 1827, it al faction aas never decorated nds in the cmains of e ancient co, cattle, while the hing like dividuals, oncerning with the elevation tayaguaot hotter Yellow the therfeet, $65^{\circ}$,

America. These mixed races are on the increase, while the whites are decreasing, with a result which cannot but be a drawback to the development of a country peculiarly favourably sitnated for commerce. Indeed, in this respect, it has a superiority over all the other Central American States, the San Juan River (p. 40) and the Lake of Nicaragua almost entting the isthmus, which separates the Atlautic from the Pacific, in two. The country is, however, but thinly peopled, the density of population being but seven to the square mile, and even that scarcely expresses the real state of matters, for most of the inbabitants are collected in the various little towns of the Pacific const, and between it and the Lakes Nicaragua and Managua, from Realejo to the town of' Nicaragua. But from the latter point to the boundary of Costa Rica the country is almost destitute of population. The region on the borders of Honduras, and eastward of the lakes, is dotted with a few towns, or rather villages, but these districts are in general very thinly peopled. The old capital was Leon ( 25,000 inhabitants), ten miles from the Pacifie, but it is surrounded by five volcanoes, and the ruins in which it lies abundantly testify to the iconoclastic habits of these dangerously active neighbours, as well as to the revolutionary tendencies of the inhabitants. The present capital, Managua-a town of about 10,000 inhabitantsis situated on the southern border of the Lake Managua, but as it is built on the slope of an active volcano, it can only be looked upon as a town existing by the sufferance of the Nicaraguan Enceladi. The country is varied in its features. Mr. Baily, who thoroughly examined it, described the territory from Realejo, southward and westward-a few leagues from the ocean-as broken up by a range of hills, nowhere of great elevation until they approach the confines of Costa Rica, when they rise into mountains ranging in height from 5,000 to 11,000 feet. Between this ridge and the lakes the country is moderately level, and not much broken, but along the borders of Honduras it is intersected by several lofty ridges running in various directic - . In the intervening valleys flow many rivers, the largest of which are the Segovia, or Escondido, which falls into Blewfields Bay; but none of them are navigable in a commercial sense. There are several voleanoes, all near the sea, and standing alone, or only slightly connected with the main ridge, though they are nearly all in the direction of it. Of these Mombacho, nearly 4,500 feet, Ometepe, 5,100 feet, and Momotomba, of about the same elevation. The climate, like that of Central America generally, is best in the interior, and worst on the coast, the Bay of Conchagua and the banks of the San Juan River being, perhaps, the most mukealthy part of the country. The soil is fertile, but only a small portion of the land can be said to be either improved or made any use of. Cattle rearing after a rough fashion is the clief occupation of the inhabitants, the district of Chontales, on the eastern side of the lakes, especially affording an excellent pasturage for even greater herds than it now supports. Indigo, mahogany, cedar, logwood, Brazil wood, Nicaragua wood, and hides are the chief exports, though sugar, coffee, cocoa, and tobacco are among its products. Maize, rice, beans, and plantains are produced in great abundance, and supply the chief food of the people. Wheat is grown in small quantities in the cooler parts; fruits are plentiful, especially oranges, pineapples, guavas, breadfruit, and limes of fine quality, while the mulberry grows remarkably well. Silver, copper, iron, lead, and gold-especially in the Chontales region, where it is minel to a considerable amount-exist. But the natural
feature which gives Nicaragua a superiority over her sister republics, is the presence of the great Lakes of Nicarague and Managua, emptied by the San Juan River, at the mouth of which, on the Atlantic coast, is Greytown, or San Juan del Norte, or de Nicaragua. At ono time, in the palmy days of the Empire of the Indies, the Spauish war ships used to regularly sail up the river, and aeross the lake to the town of Granada. Now a slallow canoe, steered or paddled by dexterous Caribs, can "hardly clear on the crest of a wave without touching the bar, and light river steamers with stern wheels can searcely grope their way from rapid to rapid, where roeky bottoms strewn with boulders, and whose rapidly flowing current effectually bar their further progress."* Indeed, there seems to exist conclusive evidence that some centuries ago the sea covered the entire space now oceupied by the mouths and swampy deltas of the San Juan, in the vieinity of Greytown. Every year it becomes more and more evident that the water in the river is decreasing, while the banks of the lake are undoubtedly rising. Even the least observant of the natives of the country, Mr. Collinson informs us, will tell how the River Panaloya, or Tipitapa, connecting Managua and Niearagua Lakes, is becoming drier every season, so much so that at times lately no water communication has existed letween them. This fact-for fact it is-is in no way remarkable, when we remember that these lakes are in the middle of the great voleanic range bisecting the isthmus, and that the gradual upheaval of the country year by year increases the gradients of the rivers, and by creating a more rapid flow of water, causes the perceptible drainage of the lakes and lowers the level of the waters; the rivers in their turn form deltas, and silt up the estuary of the San Juan. Formerly, Mr. Collinson thinks, the river must have flowed out calmly almost on a level from lake to ocean, while now the turbid waters, hurrying down with everincreasing velocity, carry with them the debris disturbed by the floods of the rainy season, till suddenly they find a level bed; and the violence of the denser sea-water with the frequent violent "northers" (Vol. II., p. 143) of these latitudes blowing full unon them, they are arrested in their course, and deposit the suspended material, a deposition which it is known is always hastened when the fresh water holding the mud and sand in suspension mingles with salt, or other water of a different specifie gravity. The total length of the San Juan is about 70 miles, and its breadth varies from 100 to 300 and 400 yarls. Its banks are densely wooded, swampy, and malarious. With the exception of a fort or two, and a few Indian huts at the Rapids, there are no inhabitants from the lake to Greytown, the only living thing being the paroquets, which fly in flocks at the report of a gun, the monkeys which swing from tree to tree, the many-hued tropical birds, the endless humming insect life (Vol. I., p. 2i8), and the multitudes of loathsome-looking erocodiles (Molinia Anericana) that lie sleeping under the bushes dipping into the rivers, or on the watch for the unwary traveller, who may slip a foot crossing the rude log bridges, or fallen trees, which span the "slues," or cul-de-sacs of the river. The forest also swarms with gallipatos-the most terrible of tropical pests-and mosquitoes, which, in this part of the world, attain a vigour which ean only be matehed by the clouds which make the otherwise charming rivers of North West America something to be held in

[^12]evil remembrance. From the Lake of Niearagua to the coast in the Mosquito Territoryto which we are travelling-the country is, with a few exceptions, one dense forest. A few savannas or plains, slightly undulating, and clothed with trees, "stand c.p at intervals like islands in the long grass which often overtop the heads of the horsemen." Water is scaree here in the dry season, and the raveller is often greatly distressed for the want of it, being compelled to seek for any dregs which may have been left in the pools frequented by the dantes, or tapirs (Elasmotherium Baircli), and used thy them alike for drinking and bathing. Indeed, were it not for the sap which runs out of the cut branches of the "Bejuca" (Cissus hydrophora), the sufierings of the explorer even in the woods would be intense. This great forest is composed of palms, indiarubber trees, sapodillas, cedars, groups of fine mahogany trees, "sprawling their enormous roots over aeres of ground, and rearing their vast height from the jungle beneath almost, as it seemed, up to the clouds." The guan (Penclope), a small species of turkey, is found not uncommonly in trone woods, but with the exception of the jaguar and the wari (Dicotyles tajacu), there is nut much game now in the country. The natives aceounted for the greater scareity of gaiae now than formerly in this manner:-"Two years ago (1365) a terrific hurrieane similar to the one which, in 1867, devastated St. Thomas and Tortola, swept over the country, utterly destroying Blewfields, and laying low vast tracts of the forest. The wild animals and birds were destroyed by myriads, and sought refuge in the very roads and houses of the little clearings on the coast of the ocean and lake, where they were killed by the inhabitants. Since shen hunting has become a profitless employment; but the jaguars, too hardy and eunning to be destroyed by the same means as the other game, have grown bolder and more ferocious, attacking men whenever they meet them, and even taking the town of Blewfields by storm."* The country is generally flat, only a few ridges here and there, but of low elevation, inic. coning between the lake and the Atlantic. The soupar, or peach palm (Guilielma speciosa), is found in the forest, though it is more familiar as one of the surroundings of the lndian huts, its fruit, tasting not unlike a yam, forming, when boiled, a considerable item in the food of these aborigines. The tree is about sixty feet in beight, with a straight stem, covered by regular bands of long black prickles, used by the natives as needles. The eboe troe (Dipterix elö̈nsis), the "nuts" of which are also eaten, appears as the Atlantic is approached, for none of them are found in the vicinity of the lakes, or na the Pacific slopes of the isthmus. As the eastern coast is neared, "the vegetation, as if by magie, changes; on the lake slope the woods are prix.cipally hard and small-leaved. Mahoganies, cedars (Cedrela odorata), lance wood, (Duguetia quitarensis), lignum vitæ (Guaiacum officinale), and indiarubber (Castilloa elustica), are distinguishing features. The jungle is exceedingly rough, consisting in many places of miles of priekly pear (Bromelia karutos), bamboo with 'bejueas' vines, whieh tried the sharpest 'machete' and strongest arm to cut, while the surface of the ground, except in the bottoms of the valleys, was arid, stuny, and so heated, that our feet were burnt and llistered by it; watereourses were comparatively few, and meny of them dry. Such a country reminded me more and more of the Mosquito coast. The vines became green and tender;

[^13]erritoryorest. A intervals , Water the want the pools alike for the cut even in ver trees, pots over t seemed, ommonly cu), there scarcity hurricane over tle t. The ry roads hey were ent ; but he other at them, lat, only and the agh it is unlike a e tree is gh black "nuts" e found rn coast ods are wood, $i c a)$, are f miles harpest ottoms red by try retender;
the great coroso and cabbage palms were now mixed with the swallow tail (Geonoma), so useful for thatching, and the ribbon-like leaves of the Cirenligo latifolia, while the prickly and club-rooted zanona (Socratea) would mingle their foliage with the lowest trees (IIynenea courbaril) ; the entada with their mahogany seeds, and the swelling trumpet trees (Cecropia pellata), sarsaparilla (Snilax merlica), and the clinging vanilla began to appear, and the invaluable silk grass (Bromelia) took the place of the prickly pear. Lovely tree ferns gave their ineomparably delicate appearance to grace the vegetation; running streams occurred more frequently, and the ground became springy, and cool under our feet, while it acquired that rich black colour so suggestive of fertility "*-and I may add of malaria. Curiously enough, in this wood it is said that the great mahogany and wild cotton-trees (Ceiba bombox) would often deflect the compass from the "true" as much as three degrees. Wild honey of a delicious description is often found in this jungle, though it is, with the exception of the iguana (p. 45), about the only addition to the traveller's fare which can be obtained. So dense are the forests that sunlight rarely penetrates them, and in spite of the grandeur of the vegetation, which, after a time, grows wearisomely familiar, the exhausted explorer's spirit sinks under the combined heat, disappointmert, and monotony, and hails a stream flowing between banks of "scutch" grass, or the broad-leaved Heliconia bicolor, as a relief to those dark and ghostly forests of the sun-land. Altogether, between the Lake of Nicaragua and the Atlantic, the height of land is only a little over 619 feet above the former, the latter occupying the place of the Cordillera at that particular point.

We have now arrived at that portion of the Atlantic seaboard which is known as the Mosquito Shore, Mosquitia, or

## The Mosquito Territory.

A few years ago this was a veritable sovercign State-a kingdom governed by an Indian monarch-but it is now merely a part of Nicaragua, though controlled to some extent by treaty obligations entered into by Great Britain and the republic. It derives its name-not as is commonly supposed from the presence of mosquitos, for in reality these insects are not more abundant here than elsewhere, but from a cluster of small islauds, or banks, situated near its coast, and called the Mosquittos. It was discovered in 1502 by Columbus, and though never conquered, was claimed by Spain up to the year 1600, when the king put himself under the protection of the English, and various settlements were formed in the country. Part of the region for some time figured as the territory of Poyais, and governed by a Cazique of the name of M‘Gregor, who claimed to be head of the Highland clan of that name. $\dagger$ However, these settlements from various causes came

[^14]to nothing, though in later times a good many British subjects settled at Blewfields, and on the river flowing into the bay. The king was virtually an English vassal, but our protectorate giving rise to much heartburning, both in the United States and in Central America, was virtually abandoned in 1859, when, most unjustifiably, the natives were handed over with their territory to the Republic of Honduras. As the Spaniards are hated by all the Indian tribes-and nowhere more than in this quarter-this forcible change of masters gave rise to great discontent, and finally to a rebellion. At last, in 1860, the

view on the san juan hivelt, nicahagia.
whole territory was decreed to Nicaragua, though "King George's" authority is still partially recognised. The territory itself is rather undefined, much of the country between it and Honduras and Nicaragua proper being debatable ground. According to different estimates it is stated to comprise from 15,000 to 25,000 square miles. The coast is low, but possesses, in its many bays and lagoons, several good harbours. The climate, though rainy, is comparatively cool, and one of the most healthy in Central America. The products are those common to the neighbouring regions; deer, however, abound, and half-wild horses and cattle roam the savannas. Mahogany, cocoa, ginger, sarsaparilla, and tortoiseshell are exported, while the flesh of the sea cow affords a source of food to many of the Indians on the coast of the off-lying islands (p. 32). But the trade is very insignificant, the inhabitants, who number about 13,000 , and are for the most part Indians and Sambos,
ds , and put our Central handed ted by nge of 0, the
occupying themselves chiefly in bunting and fishing, or to a small extent in cultivating patches of land, or rearing eattle. Blewfields, a little town at the mouth of the river of the same name, is the capital. Most of the Mosquitian scenery is pleasing, though not equal in grandeur to that of the neighbouring States. On a stormy day the wild surf, dashing against the basaltia cliffs, which form a considerable portion of the coast, affords a pleasant spectacle. Of this character is most of the coast from Greytown to Blewfields. Between these two points high mountain ranges run in north-west and south-east direc-


VIEW OF H.EWFIELDE, MOSQUITO TFRRITOHY.
tions, and approach the water's clge, forming bold rocky headlands and deep bays; and the rivers in this district are very short, shallow, and rapid.* After passing Blewfields the country to the north gets flat and alluvial near the sea, only a few ridges and mounds of trap and limestone marking the retiring mountains. Extensive savamas prevail, intersected where rivers or watercourses traverse them by broad belts of timber. "Though of little use," writes Mr. Bell, "for the purposes of cultivation, these savanuas are by no means dreary wastes; they present all the appearance of a beautiful English park: the ground here level, there rolling, and undulating in gentle hills, clothed in long but coarse wiry grass, and ornamented with clumps of the pretty 'papata' or fan palm, and

* Bell: Journal of the Royal Geographical Society, Vol. XXXIL., p. 212. The map illustrating this paper is the most correct one of the territory extant.
groves of dark and stately pitch pines. Occasionally is found quite a European bit of scenery, where pines, live oaks, and willows, with banks of tall fern and moss, afford shelter to troops of deer and numbers of Indian rabbits that feed on the cones and acorns. As you go inland the savannas become overgrown, and gradually give place to the forest, and the land becomes higher as it recedes from the sea." These tracts, when they are of sufficient extent, afford excellent pasturage. The Indians rear cattle and horses on them, while the deer, pumas, and quails, which also abound, afford good sport. In the early dawn or the cool of the evening the deer (Cercus Mexicanus) come out of the forest, and then the Indians, concealed to the leeward of the game behind clumps of fan palms, kill them with arrows. In Guatemala it is said that when the Indians have killed a deer they let it lie in the woods, or in some hole covered with leaves, for the space of about a week, until it putrefics and becomes full of maggots; they then bring it home, cut it into joints, and parboil it with an herb which grows there, and greatly resembles tansy, which sweetens it again, and makes the flesh tender and as white as a piece of turkey. Thus parboiled, they hang up the joints in the smoke for a while, wher they eat it, commonly dressed with Indian pepper. Such at least was the account given ly one of the earliest writers* on the country, but whether the description applies now or not I have been unable to accurately ascertain. Still further north-from Pearl Key Lagoon to Cape Gracias-a-Dios, and from thence to Brewer's Lagoon-the coast is a long stretch of sandy beach, with the tall mangrove trees behind. "From the sea it presents only the dreary aspect of an endless stretch of white surf, with an even line of green behind, without a knoll or headland to mark the whereabouts; and the Indians only distinguisi places by certain odd-shaped trees or patches of tall calbage palms which grow at the river mouths. In several places, however, there are very extensive and valuable cocoanut groves, which line the back of the beach for many miles, and yield cargoes of excellent nuts." Beyond Brewer's Lagoon the mountains again approach the sea, in the neighbourhood of Black River, Cape Cameron, and Roman attaining the height of 4,000 feet. Finally, the ranges avoid the shore till they reach Truxillo and Omoa in Honduras, where they again form the beetling cliffs so familiar to scamen as marking the cntrance to these harbours. The whole country is intersected by rivers, which is not surprising, considering the amount of rain which falls on it. Though these rivers abound in rapids and falls, many of them, after the bars at their mouths are crossed, are navigable for ships a considerable way into the interior, and all of them by canoes. Mr. Bell's description of the scenery on these rivers is so characteristic of the whole of Central Ancrica, that it would be ra.j st to abridge it. "Near the sea, as far as the salt water reaches, the beaches are wooded with white, red, and black mangroves, sapodilla, Santa Maria, saba, and a hundred other swamp-growing trees, with an underwood of small prickly palms and bamboos. These grow close down to the water's edge, supporting imumerable flowering vines, which, covering the tops of the highest trees, fall in matted festoons into the water, making a perpendicular wall of foliage, covered with sweet-smelling flowers of every hue, presenting an unbroken face for miles, except where a great silk cotton-tree has fallen into the

[^15]bit of afford acorns. to the n they ses on In the forest, palms, illed a pace of home, embles curkey. eat it, one of not I Lagoon stretch ly the sehind, nguisi at the cocoaoes of in the 4,000 duras, these lering falls, conof the would as are ndred boos. hich, ng a nting the
river, leaving a dark door into the thickets inside, or a cabbage or hone palm thrusts its feathery top through the wall, as if to get a peep of the broad river. In other places the beautiful sillico, oil, or hone palm, hangs over the river for miles, making a delightful areade under their graceful branches beneath which to paddle when the sun is scorehing on the open river. As we get out of reach of the sea water the land rises, and the vegetation assumes a new aspect; the banks are fringed with a broad band of 'kboo,' or scutch grass, above which is a dense jungle of bamboos, and above all the stately magnificent ${ }^{i}$ forest, which the Indians call real forest, in distinction from the tangled thickets of the lower parts of the river. Here the river winds through banks of sand and pebbles, the favourite resort of numbers of alligators, 'guanas, and river tortoises, which bask in the sun in the heat of the day. Here and there enormous silk cotton-trees crown the banks, growing among the grass a little apart from the forest; in other places the Indian fig bends over the water, sending hundreds of roots into it from its highest branches, and forming a luxurious shady retreat from the overpowering noonday heat. Higher up, the river is oceasionally contracted between perpendicular rocks, overhung with beautiful 'sung-sung' bushes and bamboos, which in some small rivers, bending over from either side, meet overhead, totally shutting out the sun, and casting a dark and ominous shade over the boiling river below, which rushes through the broken rocks and round the sharp bends with a dangerons velocity. Further on it opens out again into broad sunny reaches, the sides covered with bright green grass, among which the beautiful silver-barked mountain guava rears its lofty head, often festooned round with the pendent nests of the yellowtail, which ehoose this tree, as no snakes or monkeys can climb its smooth stem. Some of the rivers, as the Toongla, Twaka, and Laya Siksa, run for miles through cliffs of red clay, which the floods are constantly wearing away, so that large pieces of the banks are precipitated into the stream, with all their bamboos and trees upon them, which wave about in the water and make an extraordinary appenrance. The forest, though pretty open in the upper parts of the river, has cecasional dense patches overgrown with a small, very thorny species of bamboo, called by the Indians 'Sookwa,' interlaced with thorny vines and eutting or razor grass. In other places large tracks are covered with a long-pointed very tall reed, with leaves like the bamboo; large trees grow scantily among them, but no other underwood. In other places are found groves of calika and other palms, which strew the ground with prickly leaves and seeds, making it almost impassable for the barefooted Indians, which is more provoking, as these places are the resort of droves of 'warrel' and peccary (two species of wild hogr), whose favourite food is the prickly nuts of these palms. Covered as the ground is with wood, the only way to get a view of it is by climbing a tall tree growing on a hill; thence you see spread out before you a sea of tree tops, undulating in small hills, with a few elevated ranges towards the westward, but falling towards the east in a level plain, which, from its uniform colour, can hardly be distinguished from the sea. The land is intersected by innumerable little streams and ravines, but the soil is deep and fertile. On the small streams running into the main rivers are situated almost all the mahogany works, as the mahogany tree seldom grows near enough to the main river to allow of its being conveyed direct to it. These streams, or creeks as they are called, present the most romantic and beautiful wood-
land scenery that can be imagined, winding through dark moss-covered rocks, through avenues of tall trunks, or under a leafy arch of bamboos and 'sung-sung' trees, and the noonday sun can only penetrate the thick foliage in small patches. In places the creek opens out, and lets down a blaze of sunshine, the more frequent from the gloom of the rest, while the banks of white sand and pebbles dazzle the eye as you emerge from the shady recesses. Here flocks of curassows, with their legs stretched out and covered with their wings, recline luxuriously in the sun, and numbers of iguanas and tortoises crawl up to warm their chill blood. Occasionally an otter emerges from the clear deep pool with a

prime fish, and laying it down, gambols about on the sand; flocks of little green riverswallows skim over the surface of the water uttering their shrill cry; and gorgeous humming-birds appear for an instant at the cluster of flowers that hang over the stream, then dart into the depth of the forest again. The stillness that reigns in the woods at mid-day is something awful, uninterrupted even by the tinkling of the millions of crickets or the mournful cooing of the ground dove. All Nature seems to retire to rest for a season, when the sun, having reached his highest point, sends down a flood of light and drowsy heat. On a stone in the middle of the murmuring stream the snowy white egret dozes on one leg, unmindful of the little fish that venture near; the gaudy kingfisher preens his feathers on a twig over a dark pool where he is shortly to resume his labours; and even the restless monkeys congregate in little knots on a great spreading tree, some lazily reclined on the biggest branches, some picking one another's bair. Every now and

as he flies down to the ground in search of seeds." The animals of the Mosquito territory bear a strong family likeness to those of Guiana and Northern Brazil. We need only mention, in addition to the species already noticed, two varieties of opossums, the "araree," or bush dog, a large species of weasel about the size of a fox, the ant-bear, the warree, and peccary, the agouti (p. 44), the capibara, or water hog (a rodent, by the way, not a hog at all), \&c., and among the bird, five or six species of pigeons, toucans, trogons, maears, the king vulture, the benutiful banama bird, whose song notes have such variety in them, the pineapple bird, whose music is "just like a chime of church bells in a sweet silvery key, and uttered with measured composure," \&e. In addition to several venomous snakes and the boa-constrictor, there is the great iguana lizard, which is found in countless numbers along the rivers. Its favourite haunt is among the Indian figs, which hang over the water. When disturbed, Mr. Bell describes them as plunging into
the water from the top of the highest trees, and, attaining a length of five or even six feet, are sometimes dashed to pieces when they happen to alight on a passing canoe. The flesh is exeeedingly delieate and well flavoured, and the eggs are also rich. Alligators and a small species of crocodile abound. The latter is eaten, and though its flesh is disagreeably musky, it is white and tender. Anothei lizard-the "ishilly"-is also eaten not only by men, but by the hawks and eagles, and even the lordly puma does not despise them when other food is scarce. In addition to various species of fish, the manatee, or sea-cow, is common. It is extensively killed by the Indians, who preserve it by merely dipping it in the sea, and then allowing it to lang in the sun or smoke. Turtle are killed off the coast and on the islands, but their ehief haunt is further to the south, and while land crabs wander about the keys at uight disturbing the weary boatmen by biting their toes, fingers, and other exposed portions of the body, demolishing the remains of their supper, while during the day they have all disappeared under little tufts of grass, or at the roots of trees * The Mosquitian Indians we have already described elsewhere. $\dagger$

Costa Rica.
At one time Costa Rica was looked upon as the most promising of the Central Ameriean Republies-promising, that is to say, as the one-eyed man is distinguished for his perfect vision when among the blind. Perhaps it is still the best of them, but bad is the best. Its area is about 21,495 square miles, and its population was, in 1874, officially estimated at 175,000 , though at the present time it must be nearer 185,000. Taking the last offieial estimate as the basis, there were 5,000 eivilised Indians of pure blood, 12,000 negroes, and 600 Chinese, besides 10,000 to 12,000 uncivilised Indians. The population of European descent, chiefly Spanish, eongregate nearly all either in or around the capital in the district of the Rio Grande. Like most of Central America, the interior of the Republic is mountainons, interspersed with plateaux and valleys. Part of the Cordillera in the north is voleanic, two of the summits-namely, Irazu and Turrialbabeing over 10,000 feet in height. In the south is the range called Montaña Dota, from 7,000 to 9,000 feet in beight, and extending from west to east nearly aeross the country. Between its northern and southern branches lie the table-lands of San José and Cartago, a central plateau having an elevation of 3,000 to 4,000 feet. It is almost the only cultivated region in the country. In the Montaña Dota are also the highest points in the eountry, viz., Cerro Cheripó and Pieo Blanco, or Nemú, 11,740 feet above the sea. Several rivers flow from either side of these eentral momtains, but the two sides of the range are widely different. On the Paeifie slope the country is comparatively high, and is eut up by the Gulfs of Nieoya and Dulee. Here are found broad savannas, or llanuras, surrounded by forests, and the country is aecordingly more aceessible and settled. The Atlantic slope is, on the contrary, low, and covered with dense forests, which have for ages closed it to traffie, and allowed its inhabitants, the Pranzos, Bizeita and Terrbis Indians

[^16]- sometimes called collectively the Talnmancas-to remain in the more impenetrable regions in the state of positive savagedom and freedom. This region is cut up by the Great Lagoon of Chiriqui, in addition to a number of smaller ones "formed by the prevailing currents opposite the river-mouths," to use Mr. Keith Johnston's expression. These Indians are quite independent of the Costa Rican Government, and beyond trading a little with the Jamaica people, or with the Mosquito Indians, who come to catch turtle in the lagoons, they do not care, for obvious reasons, to come too much in contact with the whites. What has been said of the climate of Guatemala applies equally to Costa Riea-in other words, it varies according to elevation, from the feverish regions of the coast to the healthy and comparatively cool uplands of the interior. Here carthquakes are at bome, and frequently commit great damage, a very severc one, in 1841, having destroyed the town of Cartago. The soil, where cultivable, is exeeedingly rieh, all the usual tropical crops growing in perfection, but as yet only 1,150 square miles are under culture. Coffee is the chief product, the value of that exported in 1874 being estimated at $£ 892,800$, while the hides, timber, \&e., were put down at $£ 20,000$. Like the rest of Central Ameriea, the country is still undeveloped, and though probably more peaceable than most of the other republics, yet of late years it has also had to suffer from intestine quarrels, and disputes with Nicaragua on the question of boundaries-a subjeet, one would think, of very secondary importance in a country where land is of so little value, and the population so small in comparison with the area it occupies. The roads are, with a few exeeptions, mere bridle-paths, or mule-traeks. The chicf highway is the wagon-road from Punta Arenas (p. W), on the Gulf of Nicoya, the only port in Costa Rica worthy of the name, whieh leads to the capital San José-a town of 1:3,000 inhabitants-and then hence to Cartago, eontaining 10,000 people, on the Central Plateat. There are about forty-two miles of railway, part of an inter-oceanic line meditated, but which, owing to the invariable pecuniary difficulties which oppress these poverty-stricken Republies, has never been completed. Manufacturing industry is non-existent, but gold, silver, copper, iron, nickel, zinc, lead, and marble are found, though with the exception of gold, silver, and copper, they are in the usual undeveloped state of all things in these sleepy lands. The present constitution is the seventh that bas been in force since the Republic was established, and will, no doubt, in due time be replaced by an eighth. According to an official return, the revenue for the year ending April, 1877, was calculated at $2,236,000$ dollars, and the expenditure at $2,626,427$ dollars, leaving a deficit of $390,1: \% 7$ dollars-a state of matters which has existed for some time, and is likely to continue. In faet, the Republic is bankrupt. In 1871 it contracted in London a loan of $£ 1,000,000$, and in $187 \%$ another of $£ 2,400,000$, for the construction of an inter-oceanie railway. In 1875 the debt contracted ostensibly for this purpose was $\mathfrak{£} 2,400,000$, but of this sum only $£ 1,116,000$ had been spent on the line up to 1873 , when the execution of the work was stopped. Since then no attempt has been made either to pay principal or interest,* so that it is not likely that the Republic will again resort to that easy method of filling its coffers, which it pleasantly calls "borrowing,"

[^17]though in older and more honest times it used to be ealled roblery. In 1876-77 the totai exports of the Republie were calculated at $5,307,100$ dollars, of which 300,000 were exported by the Atlantie ports, and $5,007,408$ by Punta Arenas. From the latter barbour in that year $4,859,154$ dollars' worth of coffee were exported (see p. 47) ; hides, 64,533 dollars; indiarubber, 36,230 ; and flonr, 15,4:21 dollars. Among the shipping the following nationalities were represented :- 93 North Ameriean, 44 English, 10 French, ö German, 23 Colombian, \&e.

Costa Riea was diseovered by Columbus on his third voyage, and was visited by Spanish adventurers soon after 1502 . In 1821, after a struggle with the faction which wished to unite with Mexieo, tho fate of a battle fonglit at the Laguma de Oehomogo decided its erection into a sepurate Republie. In 1Sit it joined the Central Ameriean Federation, and when this short-lived union broke up in 1539, it again resumed its independence. Its position at one end of Central America, separated from the nearest State by an extensive waste country, is favourable, if not to commeree, yet to peace, which is even rarer in that revolution-racked land. At oue time also the poverty of the people was their safeguard. Turbulent and needy men left Costa Riea alone, and while the rest of Central America was a prey to factious revolutions, "self-appointel regenerators and pretended politieal theorists," it enjoyed almost perfect tranquillity. But this day seems over, for in late years internal dissensions have produced continual changes, civil wars, and insurreetions, so that few of the later presidents have served their full term of office. At one period, no portion of the Spanish king's dominions were thought so miserable and profitless as Costa Rica. Less than seventy years ago, Juarros represented the district as so impoverished that he suggested that the name, "Rich Coast," had leen given to it ironically in contempt of the few resources it possessed.*

## CHAPTER III.

## The Isthaus of Paxama.

The Isthmus of Panama, or Darien, belongs proper! and politically to the Republic of the United States of Colombia, which will be sketchel in a future chapter. But physieally it ean best be deseribed in connection with Central America, of which it is really a part, though the clances of revolutions have thrown it in with a country whose capital lies far from the railway which has made it so familiar to thousands, who, while they know "the very noble and very loyal" city of Charles V., never heard of Bogota among the Andean mountains. I think it better, therefore, to devote a brief chapter here, before

[^18]
speaking of some general matters conneeted with Central America, to that isthmus, the name of which has at least for three centuries been more familiar to the ears of the civilised world than any of the Republics in its immediate vieinity. In these prossic, all-wise days, one cannot fully pieture the exeitement whieh the diseovery of the New World raised in Europe. In itself the tale which the bold Genoese had to tell was suffieiently wonderful, but it was exaggerated by the vague, uneertain, ever-gathering reports which passed from mouth to mouth, from sea-port to sea-port, and on to the inland capitals, until at the court of Henry VII.-who, but for an aceident, might have had the undeserved grood fortune which fell to Ferdinand and Isabella *-the diseovery was pronounced a "thing more divine than human." And what an adventure it was ! New trees, new men, new animals, new stars, to be seen. Nothing bounded, nothing trite; nothing which had the bloom taken off by much previous deseription! These early voyagers, moreover, were like children coming out to take their first gaze at the world with ready eredulity, and unlimited faney, willing to believe in fairies and demons, Amazons, and forms of a lower hemisphere, mystic islands, and fountains of perpetual youth. $\dagger$ And soon, amid the wild tales of the Islands of the Blest, where hunger and cold were unknown, and nakedness therefore not to be dreaded-where, during the livelong day, the sun glowel with cheerful warmth, and the mellow nights were illumined with a moon such as even Castile and Leon knew not of, and by constellations that were strange to the mariners who first saw them-where fruits of the richest lues lung ready to be plucked, where fishes of the brightest colours swam in the waters, where gold was as dust, and precious stones as pebbles, and where the natives were "clothed with sunbeams"-the name of "Panama" was often heard. The title of "Castilla del Oro"-Golden Castle-was applied to a portion of the isthmus which is now known to be, perhaps, the most unprofitable and unhealthy portion of the whole region, and where the settlers, instead of gold, find graves. "In this realm of enchantment," writes Preseott, "all the aceessories seemed to maintain the illusion. The simple natives, with their defenceless bodies and rude weapons, were no matel for the European warriors armed to the teeth in mail. The odds were as great as those found in any legend of ehivalry, where the lanee of the good knight overturned hundreds at a touch." The memory of the cruelty of these early explorers-Ojeda, Nicuesa, Enciseo, even Balboa-and above all Pedrarias Davila, that terrible old man, still lives in the Indian memory. At present there may be about 10,000 aborigines seattered over Boeas del Toro, the northern portion of Veragua, the north-enstern shore of Panama, and almost the whole of Darien; they consist principally of four tribes, each of whom speaks a different language, and are frequently at war with each other. They are profoundly suspieious of the whites, and some of them have not even yet abandoned all idea of onee more regaining their lost rights. Until late years one of the Savaneric chiefs assumed the pompous title of King Lora

[^19]Montezuma, and pretended to be a descendant of the famons Mexiean Emperor (Vol. II., p. 240), though one can seareely credit that this idea was of home growth. Almost every year ho used to send an envoy to Santiago, the eapital of the district of Veraguns, to protest against any assumption of his rightful authority as lord of the land. So jealous are theso Indians of Europeans, that though a Cazique, or chief of the Bayanos, used frequently to visit the British Consul in Panama, yet, when the visit was proposed to be returned, our representative was promptly informed that no Europenn was allowed to enter their country, and that if the attempt was made it would only result in the death of the rash man, bo he who he might. When in Panama I was told by a dealer in pearls and gold dust that frequently Indians arrive from the interior with small quantities of gold dust for sale. They unroll it from the corner of a bit of cloth, look suspiciously around, eagerly grasp the coin they receive for it, and immediately expend it on some article of use or luxury, but are notably deaf to all hints as to where they got the gold: to all queries in that direction they simply reply with the formula Quien saabe?-"Who knows?"-or more politely, Non iutienlo, Señor-"I do not understand, sir." Mr. Bidwell tells us that one of thmo "chiefs" used to visit a friend of his in Panama, and on one occasion was presented with a coat and stick on departing for his mative forests. A short time aftervards the presents were returned with a sad message from the poor Indian, who had been degraded by his superior for his want of loyalty to his tribe, in having aceepted even these trilling presents from their natural enemy the white man. I can conceive no more humiliating commentary upon the abomination of Spanish rule in the New World than this trifling ancedote, which speaks even more powerfully for the memory of hate which has descended to the Indians from thair aneestors, than even the ghastly reprisals which history records they have taken again and again upon their oppressors. The Isthmus of Panama bas been the scene of many an unsuccessful attempt at settlement by Spaniard and Scot alike, of wild revels, plunderings, and bloodshed by buceaneer, conquistador, and gold-digger, until in modern times its only reputation-and that one not increasing-is connected with the railway which spans the isthmus, and which in its turn may have to give place to a canal, when the glories of the isthmus will again revive. In early times Portobelo was the chief town on the Atlantic side, though so unhealthy as to be the European's grave. Here the galleons from Spain entered, and here the treasures of the New World on the Pacifie were bartered for the rich cargoes brought from Castile. For forty days a great fair was held in this pestilent place. By-and-by the endless bombardings, captures, and sackings which the place sustained, combined with the rising importance of the healthier places on the Paeific coast of the isthmus, caused Portobelo to be deserted. At the present time this town, which once contained two castles, and 8,000 inhabitants, is all but abandoned. The same may be also said of Chagres, which, after the war of independence, was the Atlantic port through which the traffic was conducted. It is a miserable and unhealthy village, lying at the mouth of the river of the same name. It now contains only about a thousand inhabitants, mostly Indians and negroes, and has most probably, like Portobelo, fallen to rise no more. I can conceive of no pleasant memories connected with either, though the former town was, before the railway was built, a busy place,
especially during the rush to California. After the railway was determined on, Colon, in Navy Bay, was seleeted as the Atlantic terminus, and in this place all the traffic now centres. It is not healthy, as none of the low swampy shores of the isthmus are, thuugh even this locality tas defenders who will claim for it a certain salubrity. Be it so: whether one place in that latitude of America is a little more feverish or a trifle less so than another spot, is not worth disputing about. But this I know-having visited it-that it is not a desirable place of residence, though to the visitor freshly arrived from the "muggy" shores of England in February, or from the still more dreary snow-covered "States" at the same period of the year, "Colon," or Aspinwall-as in atrociously bad taste the Americuss insist on calling it-with its wealth of tropical verdure, looks a pleasait spot, until he begins to get acelimatised and "has his fevers." The first thing which strikes the new arrival is, of course, the motley crew of negroes and native mongrels who crowd


VIEW OF Patialso, on the panama halligoall.
the whart, and next the strange mixture of the natural and the artificial, the wild and the civilised, which presents itself here. In Colon flourish-as they flourished before "the Gringo" (Yankee, heretic) arrived-the wildly hixuriant tropie trees, and yet from amid a cocao grove we can hear an engine slriek, and see the depôt and factories of the railway company in all their intense newness and Philistinishly business aspeet (p. (il). Against the rails of the Protestant Church, imbedded in the walls of which is a memorial to Jolm L. Stephens, who spent the best years of his life in exploring the antiquities of this torrid land, leans - stoiid, primitive, and old-world - an Indian, who might have been one of those who came down to look at the fierce conquistadores and their fiercer dogs, and whose ancestors were "spent" in bearing the burdens of Nuñez Balboa from sea to sea. But nobody "spends" lim now : there he lounges in listless graee, and dolee far niente carelessness of a workaday world. Aspinwall the Americans bave named after a quondam potentate of the railway company ; and theugh for a time the Grenadian Government used to return letters so addressed, under the very proper plea that no such place was known, they have now been forced to yield an unwilling adhesion to the tasteless ehange. Yet elose by one of the gaudy hotels--all so fresh and all so prosaic-we come upon a statue erected to Columbus (p. 65), which reminds us that this new-looking town is in reality one of the oldest "eities" on the American continent, and derived its name

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from the great admiral-Christopher Columbus, Colombo, or Colon. Most of the houses are built of wood, and are of course uncuinfortable, as wooden houses must ever be in the tropics. "Colon," writes Mr. Constl Bidwell, "is very young and very green: the houses are green, the groves are green, the streets are green, the surroundings are green, but greener still than all are the persons, 1 think, who having a choice, select Colon for a residence." Everything bore smacks of "the railroad." The railroad buildings are the only ones of any consequence, the railroad officials' residences are the best, and the railroad men themselves, by tacit consent, are the lords of this hot, unwholesome HispranoAmerican or Americo-Spanish village. Swamps are all round, and the little rural-looking lanes are always ending either in, or in disagreable vieinity to, a swampy place, covered

with a dense carpet of tropical vegetation. It is indeed built on an island (Manzanilla), and all the water used is caught during the rainy season, and preserved in iron tanks through the dry one. But as rain falls here for about some eight months in the year, there is never any lack of this element, though as to the quality I camot vouch. Except for culinary purposes I fancy very little is consumed. I hazard this opinion from the state of the "bars," and a general aequaintance with the habits of the people. With the exception of beef, fish, and tropieal vegetables, all provisions are imported either from the United States or from England-chiefly the former-while New England also yields the colonists an abundance of ice, which is appreeiated in a comentry where the climate always "plays aloout between 70 and 90 degrees." Everybody-mative and foreign-speaks English, and though it is by a legal fietion under the government, and subjeet to the laws of the United Sintes of Colombia, and more particularly those of the State of Panama, in reality it is a part of the United States, governed by the foreign consuls who congregate here in great aimanace. Moreever, it is a free port, and the inlabitants who are not conneeted in some way with the railway or wharf are given over to the cultivation of bananas
for the New York market. The number of inhalsitants, many of whom are Jamaica negroes, is about 7,000 . Colon must be now somewhat dull, since the Californian traffic has almost entirely been taken away by the Pacific Railroad, yet a few years ago it was a busy place when the New York steamers, and to a less extent when the West Indian ones, arrived here. An American writing in 1855 described the population as doubled by the new-comers on a steamer day. "The hotels deserted the day before are thronged, and their hosts awake once more to the conscionsness of their functions of taking-in people. Bar-rooms again reek with an atmosphere of gin-sling and brandy cocktail, while the bilious-faced bar-keeper, only yesterday prostrate with fever, shuffles across the counter a quick succession of driuks to lis throng of impatient, thirsty customers; billiard-balls, temporarily stowed away in pockets, begin to circulate, driven by the full force of sturdy red flannel-sleeved arms; the shops flutter out in the breeze their display of Panama hats and loose linen garments, and adding a hundred per cent. to their prices, do a brisk business; the very monkeys quicken their agility, the parrots chatter with redoubled loquacity, the macaws shriek sharper than ever, the wild hogs, ant-eaters, and even the sloths (for all these zoological varieties abound in the hotels and shops of Aspinwall) are aroused to unwonted animation." The only pleasant feature about Colon is the Paseo-Coral, a drive made along the sea-shore, and which, morning and evening, and especially on Sundays and holidays, is a favourite resort of the iniabitants. "Any lover of the beautiful in nature," writes Dr. Otis, "will find it worth bis while to make a tour of this 'Paseo.' On one side charming glimpses of the ocean and of the 'Archipelago' (which cuts off the island of Manzanilla from the mainland) meet the eye at every turn, and at almost every point the conchologist may step out upon the coral reef and find sea shells, caves, and coral to an indefinite extent. On the other, a great variety of tropical vegetation invites the lover of botany to cull from its varied r.nd luxuriant growth. Here and there narrow paths lead from it to little native plantations of banana, papaya, and yam, imbedded in which the native hut, with its severely simple furnishing, may be seen, and will convey to the traveller an idea of the babits and character of the native inhabitants of this country." Yet the Colon-ists are very irate if anything is said against their city. "It is very superior to Panama" (which is the rival city) ; "it is decidedly cleaner, decidedly cooler, decidedly healthier." A visit to the freight warchouse of the railway will afford the reader a glance at the articles transported across the isthmus. The handbook to the railrond describes the contents as consisting of "bales of quinine bark from the interior piled many tiers deep, and reaching the iron triangular braced roof of the edifice; ceroons of indigo and cochineal from San Salvador and Guatemala; coffee from Costa Rica, and cocoa from Ecuador; sarsaparilla from Nicaragua, and ivory nuts from Portobelo ; copper ore from Bolivia; silver bars from Chili, boxes of hard dollars from Mexico, and gold ore from California; hides from the whole range of the North and South Pacific coasts; hundreds of bushels of glistening pearl-shells from the fisheries of Panuma lay heaped along the floor, flanked by no end of North American beef, pork, flour, bread, and cheese, for the provisioning of the Pacific coast, and English and French goods for the same market; while in a train of cattle cars that stood on one of the tracks were huddled about a hundred meek-looking llamas from Peru on their way to the island of Cuba, among
whose mountains they are used for beasts of burden as well as for their wool. A trip over the Panama railroad gives one an excellent idea of the tropics, and as it is a very leisurely journey, the traveller can observe at his ease. Indeed, the first time I erossed it we ran off the line, but in such a quiet, sedate sort of way, that we were not conscious of the fact until the conductor requested us to alight while he procured men and erowbars to raise the errant ears on to the right way again. We were then not far from Paraiso (p. 52). On every side was dense tropical forest, with paths along which tall sombre-looking Indians were journeying, machete in hand, to their airy huts, which we could see on a little savanna beyond. On every side of the lime grew a carpet of the sensitive plant (Jimosa), which folded up behind and ahead of us as we walked along. The sun went down, and the heat of the day was exchanged for the comparative coolness of the evening. At Paraiso a fandango, or Spanish dance, was going on, and so at that tropical "Paradise" -for so the name means-we halted until the train arrived and pieked us up. But, excepting mail days, there is not even a pretence at hurry, and scarcely any-at least so it was when I knew it-at punctuality. By the Company's contract with the Colombian Government they must run a train at least once a day over the isthmus and back again. Now as the fare is $\mathfrak{£} 5$, few people, unless on business intent, will travel by this expensive line. The result is that on ordinary "off days" the passengers are few, and, to use the familiar language of the functionaries, mostly "dead heads," that is, favoured or impeeunious persons travelling with free passes; and as the railroad gentlemen are the most liberal of people in the way of passes to all distinguished personages, and even-as I have reason to knowto some who do not at all come under that eategory, it is a passenger's own blame if, in the transit from sea to sea, he does not learn something of that weary road whieh Ballboa first trod, and since that memorable year of 1512 , so many thousands more gentle and simple, courageous and cowardly, gool, bad, and indifferent. The first fifteen miles of the line is built on trestles over a deadly swamp, but afterwards the scenery is pleasing and the vegetation rich. Palm trees of several varieties and of bamboo are on every side, and among other plants strange to the traveller who peeps out of the carriage window, are the great orchids which climb over the trees, mingled with the purple convolvulus, and a hundred other tropical parasites. Yet this road was cut with great toil and at the cost of many men's lives. The passenger who knows the history of the enterprise cannot help thinking, as he sits in safety and comparative comfort, of the road as strewn with "dead labourers, victions of fever, exhaustion, suicide, like a battle-field." Yet, before the railway was built, the loss to life was scarcely less. The feverish multitudes who erowded to California were often imperfectly provided with food, elothing, or means of transport, and often all too well provided with the most villainous of drinks. Hundreds fell siek of fevers, hundreds more were exhausted with the toil of the journey, while others reached Panama in the condition which an aequaintance of the writer did, elad in a very light and not over elongated shirt, and-nothing else! Some of the little stations alongside the railway, and which are also usually Indian villages, we have figured on pp. 52, 53, 56, 57. The present city of Panama (Plate XXII.) is not " the very noble and very loyal eity" which the eniperor spoke of in 1525. This was destroyed in the year 1671 by the buccaneer Sir Henry (as he is often called, Sir Thomas) Morgan, whose acquaintance we made in his eomparatively respectable days as Governor of Jamaica. Previous
to that date it had consisted of about 12,000 houses, eight monasteries, and two churches, all richly furnished, and many of them really splendid. It was the "jumping off place" for all the adventurers, north and south, and the spot to which they returned with their plunder, to revel after their career of rapine. It grew rich on oppression and robbery. The site was, however, unhealthy, and when it was rebuilt again by the emperor's orders it was vemoved four miles westward. All that remains now of the old city is a tower and a few traces of other edifices overgrown by brushwood. But if we are to believe the accounts of the old voyagers, the new city soon equalled the old one. Dampier, for instance, grows absolutely eloquent over it:-"The road is seldom or never without ships; besides, once in three years, when the Spanisi armada comes to Portobelo, then the Plate fleet also, from Lima, comes hither with the king's treasure, and abundance of merchant ships full of goods and


VIEW OF THE Village of heena vista, on the landmi hillhoal,
plate. At that time the city is full of merchants and gentlemen, the seamen are busy in landing the treasure, and the carriers or earavan masters employed in carrying it overland on mules (in vast droves every day) to Portobelo, and bringing back European goods from thenee; though the city be then so full, yet during the heat of business there is no hiring of an ordinary slave under a pieee of eight a day; houses, also chambers, beds, and vietuals, are then extraordinarily dear." * The Panama of 1878 is not a city which would lead any one to imagine that it had ever been of very great consequence. It is very sleepy, very decayed, and altogether a very tumble-down town, though viewed from the Paeific the house-covered roeky promontory stretehing out into the bay has rather an imposing appearance. Ships are, however, now the exception rather than the rule in Panama Bay. It is, moreover, a city of the dead. The heavy stone houses, with their great balconies, speak of a time with which the present has very little to do; the once fine fortifications are in ruins, the great bronze cannon have long ago disappeared, the fifty or sixty barefooted ragged soldiers fail to recall the mail-elad conquistadores, but the cathedral, the churches, and the empty nunneries and monasteries bring us back to a time when Panama was " the noble and very loyal eity" of His Most Catholic Majcsty. The Panameños of to-day are also very different from those of last century, and certainly widely different from the people

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whom Dampier saw. Except early in the morning and late at night a stranger sees very little of them. Nobody goes out in Panama during the heat of the day if he or she can stay at home. There is langour in the air, and unless one pays frequent visits to the railway, he is apt to forget that there is such a thing as energy in the world. Heavy wooden baleonies front the houses, in which a desire to keep the in-dwellers cool seems to huve been the chief ambition of the arehitect, for design or convenienee does not appear prominent charaeteristics to the stranger who sees them for the first time. The baleonies seem to be the chief part of the house. All the flirting of the ladies, and mueh of the lazy, half-asleep smoking of the men, goes on in them. They serve as a garden, promenade, and reeeptionroom, all in one. Sometimes the baleony officiates as bath-chamber, not unfrequently as


VIEW OV OMSYO, ON THE PANAMA RAILROAD.
kitchen, while most of them are utilised as a laundry and drying-ground for the family wash. One of the most disgusting sights of this-as, indeed, of most Spanish-Ameriean towns-is the ehained malefactors cleaning the most frequented streets. They invariably beg from passers-by. It seems to be a reeognised institution, and, indeed, the ragged guards compete with their charge for the alms of the charitable. When I say that Panama, in spite of the revivifying presence of Europeans and Americans, either as residents or as birds of passage, is still a Central Ameriean town, I have probably said eneugh to convinee any reader who has made the aequaintance of any such "cities," that it is not a model either in its moral or its municipal arrangements. In the Bay of Panama are several islands which form a pretty and pieturesque group, among which are Toboga and the Pearl Islands, the latter so called beeause the inhabitants are chiefly engaged in the pearl fishery off their shores. This fishery produces on an average $£ 35,000$ worth of pearls per annum. The shells are also profitable, being sold for mother-of-pearl, but the business is, on account of the sharks and other ravenous fishes which abound in the bay, dangerous in the extreme. The soil of the isthmus is rieh, and might in many spots be used for growing cotton, eocoa, sugar-cane, coffee, \&e. Dye-woods, timber for ship-building and furniture, resins, and medieinal plants abound. Maize, rice, beans, plantains, sugar-canes, cacao, cocoa-nuts, cotton, sarsaparilla, and braid of
jipijapa (the leaves of Carludocica palmata, a species of serew pine) for making hats-though the "Panama hats" are not made here, but for the most part in Guayaquil-are among the vegetable crops cultivated. In Voraguas and Chiriqui are savannas on which cattle, sheep, goats, pigs, horses, mules, and asses browse. In the same province gold is got in consideralle quantity, while coal has been seen. Salt, silver, copper, iron, emeralds, and platina have also been noticed. Gold has hitherto not been mined in any great quantity, owing to the noxious elimate in the districts in which it is found. It is chiefly extracted in the province of Panama by a few negroes, who wash the sands of the rivers Mareá and Balsas. The celebrated mines of Cana, near Fuira, were onee called Potosi, and yielded a grent return. But iu modern times they seem to have been deserted, and, indeed, there is now no road leading to the place where they are said to have been situated. Gold is, however, found in other places, and a few years ago a number of adventurers from California tried their luck in the isthmus, but with no great success, partly owing to the absence of gold, and more still to the presence of Indians and fevers.*

## CHAPTER IV.

## Central Amertca: Men and Manners.

The Indians these pages do not concern themselves with, except from a general point of view, though sueh is the way the aborigines have mixed their brown puddle with the blue blood of the conquistadores and their descendants, that in describing the ways of the American Spaniard we are incessantly landing in an Indian palm-thatched hut. The Spaniards in Central America bear but a small proportion to the native element, and in interest are not to be compared with these strange children of the land. We have already incidentally touched upon them as found in certain of the Republies deseribed. As a type of many of these tribes seattered throughout South America-which we cannot even mention-we may devote a few paragraphs to a further notice of most of them, more especially, as in the work to whieh this is a companion and supplement, the aborigines of Central Ameriea had, perforce, to be dismissed rather briefly. Taking Squier and Roberts as the best of possible guides, we find that in Honduras the native element predominates, as throughout the rest of the isthmus. Indeed, in most parts of the State, it is difficult to say whether the Indians have most assimilated in masses to the Indians, or the Indians to the whites. In the east portion of the Republic -a area of not less than 15,000 square miles-the Xieaques and Payas Indians are about the only inhabitants. They are Roman Catholies, and live on a very good understanding with their white-or whiter-neighbours, though there are still independent villages of the tribes so-called, who, refusing to drop their aneient manners, live in the mountain

[^21]pass independent, but still peaceable. Every now and then they appear in the settlements to sell their sarsaparilla, dragon's blood, and other products of the woods, along with a little gold washed from the sands of the mountain streams, or como to the coast to engage themselves as labourers in the mahogany "works," though, when their engagements terminate, they always return to their homes. It does not appear that the eivilisation was ever much higher than it is at present, and at no time were they on a level with the Quechés, Kachiquels, and Naluatls, who reared the "cities" we now see in ruins on the plateaux of Guatemala, San Salvador, and the western part of Honduras. At the same time they were always more civilised, and in the end, though they at first resisted the Spanish invaders, proved more tractable than the wild roving fishing tribes, whose homes lies along the shores of the Caribbean Sea. Their appearance is very marked. They have long black hair, very broad faces, small eyes, and that peculiar expression of sadness and docility that is accuired through long ages of oppression, to which the oppressed have reconciled themselves. The Indians all through the conquered parts of Spanish America are the same. They are, as a rule, melancholy looking people, with faces that one insensibly becomes interested in. They are industrious hewers of wood, drawers of water, and bearers of burdens, fond of living by themselves, and still fonder of the fire-water which they get from the towns, or distil after their own barbarous chemistry. They are famous for faith and probity, but are an uncommercial people, having, except in the immediate vieinity of the towns, little idea of the value of labour, and, like all their race, none whatever of the worth of time. It is always "superfluous" for them to "know the time o' day," nor do they trouble themselves about it. The Sambos I have had occasion already more than once to speak of. They are also sometimes called the Mosquitos, but in reality are a mixed race of negroes and Indians. Their origin is peculiar. Early in the seventeenth century, a large Dutch slaver laden with negroes from the Sambo country, in Africa, was driven ashore to the southward of Nicaragua, though some will have it not far from Cape Gracias-a-Dios. The negroes eseaped, and though at first they encountered resistance from the natives, they had afterwards wives and ground allotted to them.* From time to time their number was inereased by slaves who eseaped from the Snanish settlement (cimarones), or by negroes whom the planters from Jamaica brought in their various attempts to form settlements in different parts of the Mosquito Territory, while the buccaneers, who had their haunts among them during the period of their domination on the Caribbean Sea, "bequeathed," as Mr. Squier remarks, "a code of morality, which subsequent relations with smugglers and traders have not contributed to improve." The Sambos have always been in a manner protégés of the British Government, and the Governors of Jamaica from an carly date fostered them, as a means of annoying the Spaniards at little cost to the English. To this policy we owed the protectorate of the Mosquito shore, and the subsequent complications now at an end. The firearms aequired by the Sambos made them formidable adversaries of the Indians. This superiority the former were not slow to take advantage of, in so

[^22]far that for years they were in the habit of deseending on the Indian villages on the river banks, and carrying off the imhabitauts to be sold as slaves. For long an active traffic in these captives was carried on with Jamaica, until the const became deserted, or the Indian inhabitants purchased seeurity from attack by paying tribute to the fierco piratical Americo-Africans. But that day is now over for ever, and with it the Sambos have lost most of their old vigour, and are now given over to drumkenness, which is rapidly hastening their extermination, their constitution being already weakened by the unrestrained licentiousness of their carlier life on this coast. The Sambos are of all shades between the Indian and the negro, their hair, as they approach the latter, having the woolly character more developed than when their complexion approximates to that of the Indian. The women aro frequently landsome, and the children when young particularly so. Deformed children are never seen, from which fact it is shrewdly inferred that the Sambos have the ugly habit of destroying these unfortunates soon after birth. It has always been noticed that the elimate of North Amerien-and probably of the South also-is very unhealthy for cripples of aboriginal extraction. There are also some Caribs in Honduras. These are all that remain of the aboriginal inhabitants of Smin Vincent, one of the Leeward Islands. "During the eontests between the French and English for the possession of the smaller islands of the Antilles, the Caribs of San Vincent were almost invariably attached to the French interest, and gave so mueh trouble to the English authorities and inhabitants, that after many eontests and mueh bloodshed, they were finally, in 1796, carried en musse, to the number of upwards of 5,000 , to the then deserted islaud of Roatan, in the Bay of Honduras. The cost of this deportation was not much less than $£ 1,000,000$ sterling. A few months afterwards they were invited to the maimland by the Spanish authorities, who aided them in founding varions establishments on the coast, in the vicinity of Truxillo. Sinee then they have increased rapidly, and greatly extended their settlements, both to the eastward and westward of that port." In 1832 they rebelled, and were severely punished, while others of them took refuge within the colony of Belize. When San Vincent was first visited by Europeans, it was in possession of two distinct families of aborigines, who, however, spoke a common langunge. These were the Black and Yellow Caribs. It is said that this distinction was ereated in much the same way as were the corresponding changes in the population of the Mosquito Shore. In 1675, or thereabouts, a Guinea slaver foundered on one of the islands in the neighbourhood of San Vincent, and the negroes, eseaping ashore, mingled with the natives, and produced the "Black Caribs." Afterwards they quarrelled, with the result that the island was divided between the two races, a state of matters which continued up to the date of the arrival of the whites. After this period disturbances broke out afresh, and, to the disgrace of the colonists, were fomented until they eventuated in open and exterminating hostilities. But in 1796 they were "a feeble folk." Common misfortunes and uncommon wrongs had forced them to unite in friendly relations, though this fusion bas not been so perfect that the original distinction is not even yet evident in their new home in Honduras. The Black Caribs are taller and stouter than the pure Caribs, and though both are equally active, industrious, and provident, which the Sambos and most Indians are not, the former are more mercurial and vehement in their passions than the pure race. They are also more
civilised in their habits, living in good huts, which are kept moderately clean, and according to the Caribbeans' ideas of things, even comfortable. Most of them speak Spanish, a little English, and even a few sentences of Creole-Frenel, and Mosquito-but among themselves they always discourse in their original Carib. They profess the Roman Catholic religion, and have already been noted as some of the best labourers in the malogany woods. They, however, still retain a good many of the old savage rites and customs. Polygamy is especially prevalent, each wife having a separate house and plantation, so that the labit becomes expensive. It is, moreover, not conducive to a quiet life, for if the husband makes a present to one wife, he must also make one to all his other wives. On the other hand, these ladies do not lead an idle existence. Young describes the mode of procedure when a new spouse is resolved upon. The man fells a plantation, and builds a house; the wife then takes the management, and he becomes a gentleman at large until the following year, when another plantation has to be cleared. The wife tends these plantations with great eare, perseverance, and skill, and in the course of ten or twelve months has every description of breadkind in use among them. The products are entirely her own. Accordingly she only keeps sufficient at home for her hushand and family, disposing of the rest to purchase clothes and other necessaries, more es eecially finery for herself. The men are noted for their love of dress. They wear reci bands round their waists to imitate sashes, straw hats knowingly turned up, and white shiris and frocks, long and tight tronsers; and when they have a cane or umbrella in their hands they regard themselves-and rightly too-with no small amount of satisfaction. The women are also fond of smart attire, which, when added to great cleanliness of person, is a hopeful sign. They are not handsome, but they are pleasant in appearance. When bringing the products of the plantations for sale they dress in ealico bodies and "lively patterned" skirts, with handkerchiefs tied around their heads, and suffered to fall negligently behind. Much of their timo is spent in going to and from market. Just before Christmas they engage several boats, or "ereers," freight them with rice, yams, plautains, \&c., and having hired their husbands and others as sailors, convey their produce to Truxillo and Belize. They also walk long distances to their plantations, or in earrying their baskets of provisions to the nearest town. In the dry season the women collect firewood, which they stack in sheltered places to be ready for the wet months, industry and foresight being among the most marked characteristics of the race, and the plenty, cleauliness, and salubrity of their villages the consequent results. The Caribs have shown great capacity for improvement, though the rest of the Indian element is, if left to itself, rather hopeless, unless indeed as labourers. Above all, there is little to be made of the Sambos, the exceptions to the vile general rule being too few to do much more than prove it. They are very indolent, all the hardest labour having to be done by their wives. They are, however, skilful woodsmen, hunters, fishers, and boatmen. Captain Wright mentions that in his day-seventy years ago-the natives considered that in whatever service they might lose their lives, or die a natural death, their surviving relatives had a right to ask recompense from the employer of the dead man. It was regularly demanded even in battle. When satisfactory answers have not been given, the aboriginal troops have been known to retreat in a most dangerous and disorderly manner.* In Guatemala the Indians form a less hopeful element than

[^23]in Honduras. There the opinion is very general that the present race of Indians are inferior in intelligence to the negroes, and indeed there are those whe will seareely credit that they are the desceuduuts of the men who raised the menuments of Pulenque, Uxmal, and Chichen Itza. But the same doubt might be expressed in the case of the Egyptian Fellaheen. Can they be the descendants of the builders of the Pyramids, or of those whese genius originated so much of what has descended to our times, though now strange to the country in which it grew into form? Or can the barbarous and erafty Moers of Moroceo be the offspring of the brilliant Aralss who introduced chivalry, arts, and letters into so muel of Europe? ${ }^{*}$ The conquistadores at first expressed great admiration for the Indians, but it afterwards suited them to retract this favourable verdict, and under the plea that the gente sin razon-the race without reason-were an inferior order of leings, to oppress, degrade, and ill-treat them in every possible way, in spite of the numerous regulations enacted in the Code of Ordinances sent out by the Council of the Indies. In time the Indians, deprived of all epportunity of enjoying the privileges of subjects of Spain, or of slaring in the duties of such-ferced to labour in the mines without wages or without a power of refusal-compelled to pay tribute, and subjected to humiliating punishments, and not allowed to bear arms, grew up to consider their lot one of contempt and pity, and themselves as inferior beings. The end was that they lost the virility of character widich they possessed at the time of the Conquest, until it would not be possible now to restore their self-respect, "except through a series of efforts as prolonged as those which have humbled them have been continuous and implacable." The concuerors were, meantime, nurturing their nemesis, or rather that of their children. In due time the latter became independent of the mother country; but in place of the eitizens whom they sought in the Indians they only fonnd slaves. They tried a new policy, but they tried it too late. M. Morelet tells a case which is painfully to the point:-"With a race endowed with an organisation moderately flexible, and with a rare perseverance in its habits and customs, it is easier to efface impressions than to substitute ideas, and the Iudians at once rebelled against the efforts that were made to communicate them. In Guatemala, for example, the leading minds of the State conceived that the abolition of corporal punishment, so degrading to the spirit of man, would go far towards elevating the Indian character; yet, strange to say, as soon as the Indians themselves had succeeded in placing one of their representatives in the post of chicf executive their first demand was for the restoration of the bastinado." But they became citizens under the Republican Government, and theoretically at least on a par with their old masters. But they were not prepared for the change, and so far from contributing to the new order of things, rather aided in its retardation. No new ambition nor emulation was stirred within them, as the leaders of the revolution believed wonld be the case. All they comprehended or appreciated as to their new situation was that they were no longer under restrictions, and did not require to pay tribute. Thereupon they gave themselves to unrestrained drunkenness and general licence. For a time they did no work, and when called up to meet their obligations to the State. fled to the mountains, and in many cases relapsed into barbarism. In this way large villages, which in the colonial days were prosperous and peopled, became deserted. Roads fell into ruin, schools censed to be attended, and by-and-by the civil

[^24]war and chronic revolution whick have been, are, and will most likely continue to be the bane of Spanish'America, followed the demoralisation of public sentiment and the prostration of material interests. This description applies particularly to the Indians of the Tierras Ciulientes. "Here cael man cuts the timber for his own house, carries it on his lack to the spot where he wants it, puts it together with withes, and thatehes it with straw with his own hands. He cultivates just enough of ground to furnish his individual supplies, or gathers them from among the natural products of the forest. His scanty furniture is equally the work of his own hands, as is also the still seantier clothing which he wears. When siek, he mal ss use of

indian, fron the coant of yucatan. the few vegetable simples of which his father taught him the virtues, and which he collects in the willderness. Time with him has no value, and without hope or care for the future, his idea of happiness is a present repose. His absolute material wants are his sole exertions to aetion. Ilis vague ideas of fatalism furnish hinn equally with an excuse for his indolence and a basis of contentment under the circumstances of his condition. He supports stoically the maladies which may afflict him, and the evil furtumes that may befall him. Death almost always finds him prepared. 'My hour is come!' or ' I go to my rest; my work is done!' are the only observations which he makes on his approach." The "conversion" of the Indians is a mere faree. They used to be converted wholesale by the friars, but the proeess consisted of little more than baptism -a rite the meaning of which they had not the most remote idea of-putting a tin cross about their neek, and asking them to abandon the outward forms of idolatry. But in so far as it had some comnection with a purer life, or sounder views of the relations of man to man, or the creature to the Creator, the Indian might as well remain as his father was before him. He is a Christian in form, that is all. He is bred from his childhood upward in all manner of weird superstitions-the edifiees reared by his father are to him objects of awe-they are the baunts of invisible spirits, relatives of that red spectre which sighs and wails in the forest to mislead the traveller, whose path is ever crossed by what looks to his eye as fawn-coloured animals, but which are, in reality, dreadful enchanters powerful always for evil, but never for good; or at least they never exert themselves in that way. Ask him as to his belief in the immortality of the soul, his hopes of a future life, or his views on the subject of a Supreme Being, and he will remain silent. He does not see whither your questions are tending, and long religious oppression has taught the art of dissimulation at such seasons; and
how golden is silence at all times! Yet his life is not an unhappy one, or, at least, might not be. In his own way he has all that be needs. At ten he is a better woodsman than most whites who have passed all their life in the country. He then accompanies his father in his excursions, or his labours. "He is taught," writes M. Morelet, "to find his way in the most obscure forests, through meaus of the faintest indications. His ear is practised in quickly detecting the approach of wild animals, and his eye in discovering


STATUE OF CHRISTOPHEL COLUMHUS AT COLON.
the venomous reptiles that may lie in his path. He is taught to distinguish the vines, the juices of which have the power of stupefying fishes,* so that they may be caught by hand, as also those which are useful for their flexibility, or for furnishing water to the wayfarer. He soon comes to recognise the leche Maria, the precious balm with which he can heal his wounds, and the guaco $\dagger$ which nentralises the venom of serpents. He finds out the shady dells, where the cacao flourishes, and the smuny eninences where the bees go to deposit their honcy in the hollow trunks of decaying trees. He learns, or is taught, all these things early, and then his education is complete. When he reaches the

[^25]age of sixteen or seventeen years, he clears a little spot of ground in the forest with the aid of fire and his machete. He plants it with maize, builds a little hut in the corner, and then brings to it a companion, most likely one who was affianced to him in bis earliest infancy. Without doubt he has some regard to the age and attractions of his female companion, but his marriage, if the union can be so called, is based on none of these tender sentiments and mutual appreciations which, with us, lie at the foundation of the social superstructure. But it must be said to the credit of the Indian that he loves his home. His hut is his asylum, where he enjoys an authority and isolation which compensate for the contempt or the assumption of superiority of the whites." There no one interferes with his tastes or habits of life, and his children never dispute his authority, or contravene his wishes. Within his small circle his mode of life is essentially patriarelal. His Government, where he had one of his own, was the zame. His food is simple-his general sobriety great. But both are owing to necessity; for when this is removed the Indian ceases to be an anchorite. Beans, tortillas, a few hananas, raw pepper for seasoning, beef eut in slices and sun-dried, a little pork, a few eggs on great occasions, and a cup of chocolate at long intervals, with such fruits as Nature herself offers, constitute the Guatemalan Indian's dietary curriculum. He lives a life devoid of excitement. His sensibilities are dull; his enjoyments are few; his griefs as rare; but neither affect him keenly. Time never weighs heavily on him; he keeps no account of it, and as a necessity does not understand that terrible disease of eivilisation, for which the French couid only invent a name -enmui. Yet, as we noted about the Mexican Indians, they are animated and loquacions when among their own people, though what they find to talk aloout in an unintermittent flow of words all day, and half through the night, has puzzled many a traveller, who only knew them previously in their impassive moods. In Yucatan, until comparatively recent times -though, I believe, not now-every Indian was compelled to cultivate about one-fuarter of an acre of maize every year, under pain of having to work on the pullic roads until the estimated value of his labour equalled that of the average erop from the lands which they had failed to till. This was to guard against that idleness and improvilence of the native Indians whieh, in Central America, stand out in such marked contrast to the industry of many of the Caribs. But there was another and more barbarons mode of foreing the gente sin ruson, to remember that man lives even in Central Ameriea by the sweat of his brow. This was a perpetuation of the ancient colonial law of the mita,* $1, y$ which every colensed person-that is to say negro or Indian-was compelled to work out a delt as the alsolute slave of the creditor, who, moreover, had the power of selling the debtor to any other person until the delt, either in whole or in part, was paid. The only privilege which the deltor had was that he could appeal to the authorities for a change of master, when he could show that the one he was then under was eruel, or did not properly provide for his necessities. The result of this abominable system was that the Indian, instead of trying to free himself, got deeper and deeper into his master's debt, until finally losing all care for the future, he and his family after him became the taskmaster's serfs for life. This was, of course, simply slavery in another form, and was perpetuated by the proprietors because it afforded a ready supply of labour at little cost. In some of the districts of the country as many as

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four-fifths of the Indians would in this manner be "compromised" to the leading proprietors, who, having all the authority and influence in the distriet, exereisel it in a manner which renders the condition of the unhappy Indians pitiable in the extreme. The Indians of the higher plateaux of Central America are, as we have already seen, superior in intelligence, comfort, and general condition to those of the hot-lying coast lands. In the higher upland plains-Los Altos, as they are called-we find a more active race, descendants of the old city builders, "men whose heads never grow grey," and who have aspirations beyond supplying the immediate wants of the hour. They also supply mechanics to the coantry, and under proper care and a better system of education could rise to be useful citizens, or at least as useful as Central America is ever likely to have. The Indians of the other republies-so far as they affect the weal of the commonwealth, and of the Istlimus of Panama-I have already touched on, so that interesting as the discussion of their lot is, we cannot spare more space to this part of our subject. What is to be the future of thest Indians? The whites dominate by dint of their superior intelligence, resources, and knowleuge, and in virtue of the prestige which the Conquest gave them. But the white in Central America-as seems to be a law of nature in regard to the Luropean who lives for long in the tropies-is deteriorating. Moreover, he is greatly inferior in number to the Indians, and is not increasing so rapidly as they are. Will a day come when the Indian will arise and re-assert his rights? That he could do so is certain. But that he has the patience-the staying power, so as to speak-neeessary to accomplish this, is very doultful. Above all, it is all but certain that he has not now the spirit. There have been rebellions of the Indians in Mexico, and even throughout Central America, in Guatemala especially, when Carrera and his savage hordes tirrew the country into a tremor. But I cam hardly believe that there is much chanee, at least in our day, of seeing such rebellions resulting in great things. Nor, infamonsly bad though the rule of the white man is in these regions, are there the slightest grounds for belief that the pulfo bif the brown one would be an improvement. On the coutrary, it could only result in /N ilshed and anarchy.

If further proof were required of the identity of the race inhabiting Central America -at least the northern part with Mexico-it would be found in the shape of the monnments in both countries. In Guatemala, when Cortes traversed the regions in which they are chiefly found, there were no inhabitants, while in Yueatan there were found, from the island of Cozumal to the frontier of Peten and Tabasco, inhabited towns in numbers, which, to use Herrara's words, were "frightful to contemplate."* Yet the ruins of Yucatan are identical in arehitectural design with those of Guatemala. They are like them in their pyramidal bases, their absence of arched roofs, the use of stuceo and painting in their decoration, the bas-relief cut on their walls, and in the resemblance between their hieroglyphic symbois. Again, the ruins of Yueatan are of the same nature as those of upper Mexico, which have been attributed to the 'Toltees, so that it is not straining the argument too far to say that from Guatemala northward the "cily builders" were of the same race. But the nature of these ruins, their appearance and
*"En todas las Provincas se han hallado tantos $y$ tan grandes edificios do canteria quo espanta."Herman.
general display, our space will not admit of describing, except in the general sketch already given. In Palenque are found the chicf ruins of this description. Weird and strange they appear in the depth of the tropical forest, and when night falls over them the imagination can easily picture them, as do the Indians, as tenanted by the spirits of their early oecupants. As if to afford a striking contrast between their past and present history, the ruins during the fine season are a favourite place of resort for the fashionable people of Santo Domingo, who establish themselves here to the great damage of the monuments, which bear many traces of the sojourn of these irreverential descendints of the conquistalorcs. "They suspend their hammoeks under the shade of the majestic trees, and swing in them indolently, listening to the murmurs of the streams, and regaling themselves with the shell-fish which are found here in great abundance." Such is the description that M. Morelet, in disgust, gives of these sensuous disturbers of the pleasures of Palenquean imagination.

There are, however, still in Central America independent tribes of Indians, whom the "civilisation" of the whites-fatal gift-has never reached. Before leaving this part of our subject, we must devote a few lines to these interesting people. To the east of Peten are found the remnant of some of these tribes. They are the Lacandones, who roam over the unexplored Cordilleras, content to be left alone. The most daring of them will sometimes venture as far as the frontier to proenre by barter some artieles which they find themselves in need of. As a rule, however, they shum all intercourse with the whites, from whom they conceal themselves, wateling their movements from their retreats in the momintains. They are atill armed, as were their fathers, with bow and arrows, and so little accustomed are they to tirearms, that the discharge frightens them as it did in the primitive days of their race. They are polytheists, and they are polygamists, with many of the weaknesses which attach to the love of many gods and many wives. They arc remnants, for the most part, of the old stock of the Lacandoncs, to whom have gathered the broken fragments of Manches, Tholes, Puehutlas, and other eognate triles, who have ehosen to abandon their ancient homes for the sake of freedom in the wilderness. Though the region whieh they inhamt has been penetrated in various directions by several ecelesiastico-military expeditions, yet it is at present almost as little known as some parts of Central Asia, or the inte:ior of Africa. For more than a century and a half the inhabitants have ceased to be sobbers, and at present only aim at isolation and independence. Their ambition is limited to being let alone. If they meet a white man they say to him nothing more than they can eseape saying, and their business being concluled, they depart to their homes by obscure and unknown paths. M. De Waldeek met some of them, and gives an account of their habits, which are by no means pleasant. Their temples or plates of worship are hidden away in the forest, at a distance from their villages. Here they perform their idolatrous rites after the custom of their ancestors. Their costume is the same with that of the figures on the bas-reliefs of Palenque and Oeosingo, while, aceording to M. De Waldeek, their moral state is so low that no dependence is to be placed on their asservations, unless taken in the name of their ancient demi-god Ballam. It is also whispered that cannibalism has not yet become extinct amongst them, even in the regions lying elose to the Spanish settlement where the priests affect to have
"converted" them. They eat the great red monkeys called alüates. On being asked the reason of this practice, one of them replied, "Our ancestors killed and ate their


enemies ; but since the Spaniards, who are the strongest, have come, they do not allow us to continue this custom, and do not even permit us to eat what of right belongs to us-our children. Hence it is that we attack these little men of the woods, whose flesh
is equally grood, and whom we are allowed to kill with impunity." Bat besides these Indians there is in the unexplored interior a large native population, having no relations either with the Indians or with the inhabitants of the towns, while the configuration of the country and their own ferocity prevent any one with a proper regard for what the surgeons. called "continuity of tissue" penetrating into their fortresses.* The Itzaes, who for a century and a half established themselves on the island of Peten, in the charming Lake of Itza, where now stands the town of Flores, was also one of the tribes which for long maintained its own against the Spaniarls. A retired place has always charms for the Central Ameritan Indian. M. Morelet describes him as jealous of his independence, and always. concerned for the safety of what he possesses. He retreats before civilisation, and strives to conceal the results of his industry and skill in the heart of the forest. One sees with surprise that the lands around his villages are always uncultivated, and wonders where are the fields whence he draws his supply of provisions. They are often leagues away, in seeludel and unknown localities; and should their owner conceive that they have in any degree diminished in fertility, or should he be disturbed in their possession, he does not hesitate to abaudon them, and scek out a new and more secure place for his plantation.

## Political Life.

They who have perused these pages must have come to the conclusion that in Central America a "strong government" is a rarity, and as it invariably is a despotism, hardly more to be desired than a weak one. For instance, as I write there comes news of a revolution amoris the Spanish negroes of San Domingo, at one end of IIayti; and, as if to keep the balanee true, the curly-headed Frenchmen in the sable republic, at the other ene of the islaud (Vol, II., p. 315), are engaged in the same improving occupation. Prosident Baez has fled, General Somebody else has "proclaimed" himself, while President Buisrond-Canal is in very hot water at home. But why the Dominicans have sprang the $p^{n}$ litical mine on which they always sit, or for what reason the Haytian patriots an lombarding Port-au-Prince, we do not know, and it is very questionable if they know themselves. The polities of tropical America are among those things which many have attempted to master, but nobody has yet understood. Baron Reuter does not enlighten us, and indeed states the fact in a languid telegraphic sort of way, with no expectation of exciting anybody short of a Haytian bondholder ; and even they, having never received any interest for an indefinite period, can only receive the intelligence of their debtors killing each other with a faint gleam of hopeful satisfaction. Things are always at the worst in Hayti, and they never mend. The trutli is that, to a time beyond which the memory of man runneth not, Hayti has always been in revolt against somelooly, or on the eve of a revolution against something, and San Domingo amusing itself by chasing out one President and bringing in another. Revolutions in these regions are about as. frequent as earthquakes, and almost as useful. Henee they pall on the intelleetual palate, longing for political food less monotonous. Cuba has nominally elosed for the tine being

[^27]e ten years' civil contest; Hayti has burst out into what the sporting prophets would call a "double event" of the same character; Colombia has emerged from a similar disturbanee; while the States of Central Amerien, after resting frem the condition of utter exhaustion in which they put themselves in 1873, are again preparing to bombard each other's towns, cut each other's throats, and commit other erimes in the name of liberty. This is a fashion they have in Salvador, rinatemala, Costa Rica, Niearagua, and Honduras. Anarcly is the normal condition of affais; peace and good govermment the exeeption in these unhappy republics into which the g.eat "Empire of the Indies" shivered. Nor are we aware that there are any "lessous" to be learued from this miserable state of affairs, though the doctrinaires have never wearied of attempting to extract a moral from these very immoral politieal failures. One wiseacre will prove entirely to his own satisfaction that the priests are the eause of all the trouble, while another will show as conclusively that it is the neglect of true religion that has brought this visitation of pronnuciamientos on unhappy Hispano-America. Next we read a doleful little essay, showing that it is the poor Indian's untutored mind that cerebrates after this unpleasant fashion, only to be presented with another treatise intended to demonstrate that it is the neglect of the Ethiopian's unconquerable iteh for voting and preaching which has brought his adopted country down to its nomally low political ebb. Finally, we have perused so many artieles tending to show that the mammon of aristocratic unrighteousness is at the bottom of it all, that we might have been couvinced, had we not at the same time treen favoured with a pamphlet or two proving fuite as clearly that Spanish Ameenica was a sad warning to all who imagined that a republic was the political millennium! The truth is far apart from any of these specious theories. The miseries of Spanish America are of a very old date; they originated in a condition of things in vogue prior to the liberation of the colonies; and the curse they are now suffering under is the dumnosa hareditus which has descended to them from three centuries of misrule. What this was I have attempted to demonstrate in another place, so that I need only here sketch it out very briefly.

The Spaniard is at best not an estimable individual. He is polite, but his politeness is the embodiment of haughty contempt for a world not built up of hidalgos and grandees. It is, as a late British Consul in Barcelona reported, "the diamond ring on the dirty finger." No man will so grandiosely leg His Worship, the most excellent Señor, to consider his goods, house, and fortune at his disposal as the average Spaniard, and yet at the same time be more astounded if his mouthful of fine words be taken to mean more than a glass of lukewarm water and a bad cigarette ( $\mathbf{p} .2 \mathrm{I}$ ); while, if thwarted in the smallest thing, there lives not a ruffian who will curse more freely, or put a knife under another Caballero's fifth rib more deftly or with a statelier air, than Señor Don Camillo Guzman Migael Pedrillo, whose family papers were, with such difficulty, saved at the Flood. When we first knew them the Spaniards were a poor race, easily conquered, but so treacherous that the "vietorious Sixth Legion" was generally kept by its Roman commanders as far from Hispania and mischief as possible. The Arabs brought learning and art to Spain, and the Jews brought commercial knowledge. With the expulsion of the Moors, much of Spanish art left Spain, and with the Jews many a bright intelleet that the country has since been sorely in need of. Just then the New World was discovered, and what Spain had lost in lrains it gained in gold. For a time the

Mexiean pistoles and the treasures of the Ineas enabled the mother country to lire mercenaries, build ships, and bribe statesmen, and so maintain a hollow greatness. But when this artifieial stimulus departed, then also faded away the tinsel "glories" of Spain. She sank down to the humble phace intended for her in the economy of things, and becameas she is to this day and will continue to be-a conservatory for old customs, old ideas, quaint proverbs, narrow bigotry, pieturesque peasants, old masters, and new wine. One thing has, however, never forsaken the Spaniard, and that is his courage: it is the birthright of his race. One almost stands aghast at the daring of the conquistadores-at Cortes, Pizarro, Alvarado, and the rest of them-and horrified at their cruelty. Their

indian of the old aztec race.
courage was something hardly of this world, and their greed of gold and utter unserupulonsness surely the belongings of what in Parliamentary language is called "another place." Every man and woman in Spain lusted for "hawksbills" of the precious metal, and no danger, no hardship, searee any crime, restrained them in their feverish desire to get it. If any sueh seruples stood in their way, there were always the shavelings in their train to urge them on for "the glory of God" and the "good of the Church." Twenty-two years after the settlement of Hayti, the Carib Indians were reduced in number from-it is said-2,000,000 to 14,000 . They had perished in the gold mines-men, women, and children-for all were compelled to work. They had been slaughtered by arquebusiers, they had been torn by bloodhounds, or, weary of life, they had thrown themselves and their loads of ore over the precipices of the land they onee owned, and now toiled in as slaves. In all Spanish America it was the same. In Pern, for instance, the land resounded with the melancholy song of the women bewailing the sad fate of their husbands and brothers, toiling in the silver mines, or wearing their lives away in the mita. Mothers maimed their ehildren so that they might not be delivered to the tormentors, while the priests inflieted 100 blows of a whip
on any one who married an idolater, so careful were the corregilors and the padres to get the most out of the red men's bodies and souls. A knight was wounded in Guiana, and the surgeons, to see how far the lance might have penetrated, equipped an Indian in the knight's armour, as a target for the spearmen. Afterwards they probed the wounds, and made their diagnosis. Such was the use they made of those whom Sir Walter Kaleigh described as " $a$ naked people, but valiant as any under the skies." When the Indians were all but killed off, negroes were imported, and the importers thus unconsciously brought a Nemesis,


INDIAN WOMAN OF THE OLD AZTEC RACE.
which was to work them vengeance. Nor were they particular as to the colour of their slaves. A trader who could not get black men took brown ones, as was the fashion of the day. Francis Sparrow bought-as it has been my unpatriotic duty to relate elsewhere-" to the sonthward of Orinoco, eight beautiful young women, the oldest not eighteen years of age, for a red-bandled knife, the value of which was in England, at that time, but one halfpenny."

Nor were the colonists treated much better. Everything was reserved for Spain and men of Spanish birth. The Greek theory of colonies-that they were solely for the benefit of the mother country-prevailed. No creole-that is, Spaniard born in the countrycould hold any office. Every post in the gift of the king was put up to anction in Madrid, and sold to the highest bidder, who, of course, made what profit he could out of his investment in official stock. No foreigners were allowed to trade with the colonies, and, as a consequence, buccaneering and smuggling went on wholesale. Any foreign sailors
wrecked on the shores were treated as pirates. The colonists were discouraged from communicating through the nedium of letters; newspapers were almost unknown; and intercourse between the different colonies was as far as possible prevented, in case the ereoles might plot against old Spain. They had, moreover, few opportunities for education, and were oppressed by the most villainous of taxes. Any person, for instance, not in possession of a Bula de Confesion, lost all rights as a citizen, or even as an individual, while justiee was bought and sold. Three centuries of such oppression and misgovernment did its work so thoroughly that when the colonists, in the hour of Spain's adversity, threw off her yoke, they found the bulk of the people unfitted for self-government, and, least of all possible governments, for that which they adopted. They had been so long kept in ignotance, that they absolutely retained most of the worst laws of old Spain. In nearly all the colonics there was no religious toleration, and in few of them were foreigners allowed to settle or trade freely. So long had they been isolated from each other, that the mutual jealousies which had grown up prevented their leaguing together for the common weal. On the contrary, they split up into numerous rival republics, which have disintegrated more and more ever siuce. There have been continual wars of races-the Spaniard, the negro, and the Indian having each in his turn gained the upper hand, and tyrannised over the country. Public spirit is unknown, self-sacrifice for the public grod a mere theory, and the greed of place and pelf all-powerful. Central America is perhaps the worst of all of these governments; Chili perhaps the best; but even Chili, though hopeful, is as yet an unsolved problem in polities. But there is really very little to choose among them. Added to this is the prevalence of the most ludierons self-conceit, and a haughty arrogance which now and then takes the inconvenient form of insulting the consul of some great power. A President is elected, but no sooner is he inaugurated than his rival issues a pronnnciamiento, and tries to displace him by force. In Venezuela-which in a short time we shall visit-a minister of the Republic congratulated Congress that there had been only serenteen revolutions within the year. Sometimes the soldiers take the election into their own hands; at other times they try a Dictator, and, very often without trying for it, anarchy pure and simple prevails. Then arises some sueh scourge as Rafael Carrera, an Indo-negro mongrel, at whose name Guatemala trembled for years (p. 21). This individual has more than once appeared in these pages. He was certainly one of the most remarkable men whom Central America has produced, and in some respects one of the greatest. Yet he was a terrible politician, and, like Henry VIII., "an expensive Herr." A traveller, writing in 1817, thus describes his appearance in the market-place of Guatemala:"All at onee the guard at the cuartel beat to arms, and the reclining soldiers leap up, seize their muskets, and range themselves stifly along the front of their quarters. We look to see the occasion of the sudden movement, and observe approaching a man of medium height, still young, with coal-black hair and tawny complexion, who moves slowly up the areade which leads to the house of the government. He is President Rafael Carrera, that redoubtable Indian who has overthrown the authority of the Spanish raee, and who now represents the national power of the State. He is dresscd in ordinary costume, without any distinctive insignia of authority. The swarm of sinister men who surround him, and whom you mistake for lacqueys, are the aids of his Excellency-sad fellows,
who have emerged, like himself, from the lower orders, bound to his fortunes, and who, to retain favour, are ready to perform any kind of service. The President marclies in silence, his head bent forward, and his cyes fixed on the ground, without responding to the salutations of those whom he meets, and disappears in the palace." Yet, that Currera was no ordinary man is proved by the fact that, thongh uneducated, and without any politicul experience, he managed to retain the power won by his sword longer thun most Centrul American Presidents, and even in 1854 got himself declared Presidente Vitalico, or President for life, with power to mame his suceessor. His titles, as printed in official reports, used to be, "His Must Exeellent Señor Don Rafael Carrera, President for Life of the Republic, Captain-General of the Forces, General of the Treasury, Commander of the Royal Order of Leopold of Belgium, Honorary President of the Institute of Africa, decorated with various insignia for actions in war," \&c. \&c. For long he refused the Presidency, alleging his want of education, and the incompatibility of his halits with the lofty position to which his syeophants wish to raise him for their own advantage, or his enemies, in order that they might make a tool of him and work his ruin. He, however, finally yielded, retaining, nevertheless, to the last his round jacket and straw hat. He was active, unserupulous, and obstinate, but thouph taciturn in his humour, and violent and sanguinary when roused, yet those who knew him best declare that this terrible man was not without a "qualified gencrosity," and that be used his power with more moderation than might have been expected from his antecedents. His origin was, like that of Rosas, the quondam Dictator of Buenos Ayres, exeeedingly humble. Indeed, their enemies declare that they were dismissed from the employment of their masters for conduct which could in no way add to their reputation. Profiting by the disturbances of the country, Carrera, at the heal of his Indians, and Rosas, at the head of his ganchos, both conmenced their career by the invasion of the capital, and this picee of audacity being successful, they both rapilly rose into power. Rosas was, however, a man of far greater grasp than Carrera, and as a diplomatist did work which the Indian could never have been capable of had ho been called upon to perform it. In 1840, General Morazin, having failed to wrest Guatemala from Carrera, had to flee with the majority of his forces, leaving 200 men in the Plaza to bold the enemy in check and cover his retreat. Next morning, after a spirited resistance, they were forced to lay down arms: then, trusting to the conventionalties of war, they were indiscriminately slaughterel. Their commander was brought before Carrera and Pae\%, his satellite. "They both fell upon him with blows, struck him to the ground, and forced their horses to trample on him, horribly mangling his body, while he vainly supplicated for death. Finally, Paez handed his own lance to one of the assassins in his suite, who drove it through the heart of the unfortunate man, and released him from further barbarities." This nightmare of Guatemala was murdered soon after attaining supreme power-having held authority for eleven years ( $1854-1805$ )-in the interests of the Indians, the worst of the aristocracy, and the priests, whose slave he was. When Canning boasted that he had "called a new world into existence to redress the balanee of the old," he did not calculate on also "calling into existence" the Rafael Carreras, and other citizens of that stamp, who, to copy the reply of the Viscount Cormerin to the Parisian Deputation in 1836, "flattered themselves they had suppressed rain because they had alolished gutters."





Photographic Sciences

Hayti, for example, has essayed every form of government on earth, and the Spanish republies almost every one short of a king, though even that form of ruler has a "faction" which now and then gets the upper hand, and (as in Honduras) burns the capital, assassinates the President, while it in no case negleets to rob the Treasury when-rare chance-there is anything in it. Finally, these experimenters at government discovered the art of robbing verdant Europeans. This they pleasantly called "borrowing," but as they never paid either principal or interest, some irate gentlemen in Capel Court and elsewhere feel how insufficient is the English language to express their opinion of the transaction. What is to be done with such countries? They are rieh, but their riehes are useless. They are on the high-road of commerce, but vils laws, political knaves, venal custom-houses, factious and corrupt officials, cause commerce to avoid them. They borrow, but will not pay ; they are insolent, and yet lhave nothing through which to punish them. Annex them? One might as well talk of annexing a nest of rattlesnakes. San Domingo has changed her nationality at least six times in seventy years; has always had to come back to independence; and at present can get nobody to look at her with intentions honourable or dishonourable. Earthquakes are pretty active in these regions, and the tornado sometimes lively. But, somehow or other, they never altogether annihilate these homes of revolt, and the sanguine newspaper reader always relapses from cheerful hopefulness back into his pristine condition of despair. The problem of what is to be done with half of Spanish America is insoluble, and that involved in the future of the other half doubtful. Perhaps the fate of the historical eats of Kilkenny may afford an approach towards its solution? This may be, no doubt, set down as prejudice : in that ease, I ean only urge the melancholy words of the great Liberator Bolivar, that the people for whom he had striven were strangers to virtue, and that he had wasted his life in plonghing and sowing the waters of the ocean !

## Soctal Life.

Any general deseription of Central American soeiety-that is, social life among the Europeans and people of Enropean descent-could not be well given in the space at our disposal, and, indeed, has already been partially sketched under the head of the individual States. Still there are certain features common to the whole country. These are intense langoui; exceeding exelusiveness, and a superficial politeness which, to the freshly-arrived stranger, who knows how to take it, is wondrously pleasant. Take Panama, for example. There life if not a burden is not lightly borne. It is too hot for active out-door life; and a ride, walk, or drive can only be taken when the road will admit of it, in the cool hours of the day, early in the morning, or in the evening. Reading, that resource of dull places elsewhere, becomes, as Mr. Bidwell justly remarks, in time seareely possible. The resident begins the day half tired, and the book surely sends him to sleep. There is also scareely anything of what is known elsewhere as "society." The foreigners associate little among themselves, and just as little among the natives. The Panameños are exceedingly reserved, and visits are carried on with sise, an amount of eeremonious etiquette that to most people they get fatiguing; while the young men of the place, cven those who have been educated abroad, prefer the amusements of dirty cafés and billiard rooms to the society of their sisters and lady friends. Sometimes a ball is got up, when anybody has energy enough to take
the requisite trouble. Then a pretty collection of young ladies make their appearance, with gentlemen to mateh. But for months afterwards-unless, indeed, at an early massthe latter will have little chance of ever seeing one of the former; and, indeed, begin by wondering where tiney all came from, and end by being puzzled where they have all gone to. Yet, in most Spanish countries access to seciety is not diffieult. In Panama, however, there are circumstances which make the people draw within themselves. Panama is the high road to every place, and the halting-place of many adventurers whom experience

has taught the natives to regard with profound suspicion. This suspicion they almost instinetively visit on those who do not deserve it, until in time the nat ural Spanish pride and reserve have become what it is in the isthmus. The morality of women of Spanish descent does not rank high in publie esteens. But this generalisation has been founded on the hasty observations of passing travellers, who, forgetting that birds of passage do not always see the best of any country, but only that portion which lies nearest to their path, make sweeping conclusions from their very imperfect premisses. The Panameños, as a rule, are graceful, pretty, and lady-like, affectionate daughters, good wives and mothers. and industrious, we are told by Mr. Bidwell, "to a degree which is little eredited by foreigners even long resident in Panama. I have known whole families almost supported by the needlework of the daughters of the household; yet these girls were none the less young ladies; they saw only the merit of their work; it did not make them descend to the seale
of the couturicire in Europe. Considering the little means of education available for the bettel class of girls in Panama, there being no private schools, and few persons capable of teaching, there is much to be said in praise of the industrial and economical habits of the Panameños in the higher walks of life." The poorer classes are, however, poor, but uot honest. Marriage among them is the exception and not the rule: this ceremony they look upon as something reserved for their betters-for the Señoras and the Ninas*-and hardly befitting humble folks' ways of life. The dress of the Panama ladies is now very much the same as that of their sisters in Paris. Even the pretty custom of dressing the hair with flowers when they walked in the street has, like the Saya i maita of the Limeña, almost passed away in these degenerate days. The native labourer wears only cotton or linen trousers and shirt, and generally no shoes, but the girls are rather fond of finery. The ordinary dress is the pollera, made without sleeves, and low in front, with lace trimming on the bust. They invest all their savings in jewellery, such as charms and urnamental hair-combs, to be worn on gala days, and then pawned when they are in pecuniary trouble. Mourning is very popular, thongh black dresses are, of all garments, the most unsuitable for a hot climate. There is almost no recreation except cock-fighting and bulltoasing. This is not bull-fighting, for the wretched animal is only let loose in the street, or led by a cord, and teased by its hirers, though it rarely does any harm, being well held in check by the tormentors. To hire such an animal from a butcher is considered a delicate attention from a young man to his sweetheart on her birthday. To teach them a rough lesson, an American in Panama once let loose a bear, which he had got from California, and on being remonstrated with, he replied that he did not see why he should not celebrate the birthday of his child after his own fashion, even though his "bar" should make the Panameños take to their heels a little quicker than their bull did. Cockfighting is a common pastime among the more dissolute priests and the lower orders on Sundays and holidays. Fighting cocks are common objects of the country ; they can be seen tied to nails at the owners' doors, and with grey parrots seem the chief domestic pets. The Central Americai Spaniard of to-day has little of the spirit of the conquistador in him. He has little or no enterprise, not very much courage, though some ferocity, and even the old lust of gold, which distinguished his ancestors, has given place to a eraving for change, and an unwearied love of dabbling in tiresome politics, which few people in the country seem to thoroughly understand the rights and wrongs of, and which assuredly nobody outside it cares to nrobe to their muddy depths.

## CHAPTER V.

## Central Ayerica: Natural Productions.

In the course of the foregoing pages various remarks have isen made on the different natural productions of the region. But this is a subject on which volumes could be written,

[^28]and, indeed, have been written, so that we can only devote a few lines more to noting som ${ }^{r}$ of the chief economic plants and a few of the more remarkable animals which are charweristic of Central America, referring the reader for fuller accounts to the works already quoted.

The logwood-the palo de tinta of the Spaniard-the Heematorylon Campechiannm, is one of the most valuable trees of Central America. Under favourable circumstances it grows to a height of from thirty to forty feet. Its appearance is peculiar, the trunk being gnarled and full of irregular cavities, while its pinnated dark green foliage and small yellowish flowers, which hang in bunches from the ends of the branches, add to the peculiarity of this famous dyewood tree. It grows in impenetrable thickets, and when it once takes up its abode, it monopolises the forest, no vegetation prospering under its shade. It grows rapidly, but at the same time is jealous of being artificially treated, as the numerous failures in the attempts to neutralise it in the Bahamas and other islands have proved. It is the heart-wood which is used in commerce, the sap or outside wood being of a yellow colour, the dye, however, yielded being not dark red, like that of the Brazil wood (Casalpinia), but black, shading on purple. In the forests where it is found it is usually cut in the vieinity of a stream, down which the logs can be conveyed. But there is a total absence of care or efficient economy in hewing it, all the proprictor caring is that he should secure a sufficient quantity. Accordingly, the chopper, who receive so much money for so much wood delivered at the port of embarkation, hews down what he can and how he can, without the slightest care for the future. The mayoral, or agent, rejects all billets marked with orange spots, which are indications of decay, and then has the remainder weighed in his presence and the amount duly eredited to the collector or chopper. The mayoral is a gentleman who does not court popularity, knowing that popularity with his labourers is only consistent with allowing them to negleet their work and indulge in their natural laziness, and thus abvilge his profit, for he is paid a percentage on what he can collect for his priucipal. More ver, as the labourers are always in debt to their employer, they do not go about their worl: with any zest, and are only too apt to avoid their liabilities by levanting after they have got sufficiently deep in the books of the logwood merehant to make this exertion worth their trouble. The wood is cut down and barked with an axe, the Indian declining, with his usual conservatism, to substitute a saw for their old-fashioned implement. Also, to avoid the knot and protuberances of the lowest part of the trunk, they cut down the tree above a yard from the ground, leaving an excellent part of the stump still standing to rot in the ground, since it is well known that this mutilated portion will never send out shoots again. At this rate the logwood will soon become a rare tree. The tree is cut during the dry season, and then when the rivers rise during the rains, the accumulated stock is transported to the coast, though in certain favoured localities the cutting and despatching of it to the ports goes on the whole year round. Of course by the construction of ro.ds and canals, in the greater number of cases, the traffic might be made constant, but in Central America the inhabitants usually prefer to wait on Providence to exerting themselves in any new-fangled enterprises of this description. If a method could be devised whereby the logwood would cut itself and jump on board the ships, the proprietors might be inclined to listen to the project, but in a land where Crianza quita labranza-rearing cattle relieves one of labour-
is the characteristic proverb, anything in the shape of exertion is not very likely to be popular.*

Rosewood (Dalbergia), lignum vitw (Guaiacum), fustic, yellow sanders (Bucilla capitata), Brazil wood, a kind of dragon's blood (Ecastaphyllum monetaria), Nicaragua blood (Casalpinia echinata), and the Anotta (Bixa Orellana) may be mentioned as among the other valuable dye and other woods found in this region. The gum arabic bush abounds in all the open savannas, and in the forests may be found the copaiba gum, the copal bush, the liquid amber, pa ]ma christi, ipecacuanha, and caoutchouc tree (Siphonia elastica), from which india-rubber is obtained by "tapping," or makii:g incisions in the trunk of the tree ( p .69 ) ; while the long-leaved pitch pine covers many parts of country, more particularly the elevated portions of Honduras, from sea to sea. The cedar, which attains a height of from seventy to eighty feet, is extensively used for all purposes where immunity from the attack of insects is of any importance. The ceiba, or silk-cotton tree (Eriolleulron anfraetuosun), grows to a vast size, and is used for many of the eommon "bongos" and "pitpans." Some of them hollowed from a single trunk will measure "in the clear" seven feet between the sides. Live oak, Santa Maria (Calophyllam Calulut), sunwood, sapodilla (Sapota Achras), calabash, mangrove grape tree, iron wood, ealabash button wood, mahoe locust, polewood almond, granadillo, many different kinds of palms, bamboos, \&e. \&e., are more or less abundant through Central America, while among fruits the lime, lemon, and orange are well known and extensively eultivated. Pimento, cacao, sarsaparilla, vanilla, and other staples need only be mentioned as a specimen of the various tropical crops not already touched on. The animals are much "too numerous even to mention." The dog is native, but the horse, ass, ox, sheep, goat, hog, and cat, are all importations. The horse of the country still retains some of the Arab charaeteristies of his ancestors, but in Central Ameriea his lot has not fallen in pleasant places. A plague of insects enters his ears, bats bite him, and spiders attaek his feet, so that the hoof separates. Deer, the peccary (p. 77), tapir, manatee, monkeys of many species, racoons, opossum, squirrels, and bats, armadillo (three species), the Indian coney, or agouti (p. 44), the jaguar, and many species of birds and reptiles which, as their names may be unfamiliar to the reader it is useless giving, are among the wild fanna of the country between Mexico and Panama. Last of all, it need hardly be added that inseets are numerous and of many species. They are a terrible pest to the traveller, fully justifying Sydney Smith's well-known description, when he characterised inseets as "the curse of the tropies. The bete rouge lays the foundation of a tremendous uleer. In a moment you are covered with tieks. Chigoes bury themselves in your flesh and hatel a large colony of young chigoes in a few hours. They will not live together, but every chigoe sets up a separate uleer, and has his own private portion of pus. Flies get entry into your mouth, into your eyes, into your nose. You eat flies, drink flies, and brenthe flies. Lizards, cockroaches, and snakes get into the bed, ants eat up the looks, scorpions sting you on the foot. Everything bites, stings, or bruises; every second of your existence you are wounded by some species of animal life that nobody has seen before, except Swammerdam and Meriam. An insect with eleven legs is swarming in your tea-cup, a nondescript with nine wings is struggling in the small beer, or caterpillar with several dozen eyes in his belly is hastening over the bread

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VIFW OF THE WATERFALL OF TEQUENDAMA, BOGOTA, COLOMBIA.
and butter! All Nature is alive, and seems to be gathering all her entomological hosts to eat you up as you are standing, out of your coat, waistcoat, and breeches. Such are the tropies. All this reconeiles us to our dews, fogs, vapours, and drizzles, to our apothecaries rushing about with gargles and tinctures, to our old British constitutional coughs, sore throats, and swollen faces."

## CHAPTER VI.

Soutif America: Colombia; Ecuador.
$W_{E}$ have now left the comparatively narrow neck of land connecting the two great divisions of the New World, and in succeeding chapters of this volume will eoncern ourselves solely with South America. Before, however, entering on a more detailed account of the different political divisions, it may be well to briefly indicate some of the great physical features of this region. At the same time, it will be difficult to give any general account of a region so extensive, in so far that what might be true of one portion would be far from the truth in regard to another. Accordingly, it may le best to hinge the greater portion of our general remarks regarding the geography and produets, as well as the elimate and governments, of South America, upon the different Republies and the Empire to be deseribed, more especially as these political divisions are not unfrequently divided off from each other ly very natural boundaries. Looking, then, at South America as a whole, we find it a peninsula, triangular in shape, leading an observer to suspect that at some former period a greater amount of land stretched to the east, and that probably the rocks known as Martin Vas, Trinidad, and Columbus, and even the Falkland Islands, are the remains of this slice taken away from the Atlantic shores of the continent. And here we may remark that very little doubt can exist that at one time the Paeific shores of both North and South America extended much further to the westward, though with such speculations we need not at present concern ourselves. The present land mass is in length, from north to south, 4,550 miles, while its greatest breadth-namely, from the northern point of Pern to the extreme eastern extension of Brazil--is about 3,200 miles. It covers an area of some six and a half million square miles, about one-fourth of whieh is in the temperate zone and the remainder within the tropies. Taking the eonfiguration of its surface as the basis of the elassification, this great region is usually divided into five great regions. These are: (1) The region skirting the shores of the Pacific. This country is in general low, from 50 to 150 miles in breadth, and 4,000 miles in length. The two extremities are fertile, while the middle is a sandy desert. (2) The basin of the Orinoeo river, a country mainly consisting of plains or steppes, called llanos, either destitute of wood or only dotted with trees, but covered with a tall herbage during a part of the year. Fat, lazy cattle pasture here in thousands, as shown in the familiar seene figured on Plate XXIII. Here we see the animals half buried in herbage, or dozing under the shade of the broad-leaved Morichi palms (Mauritia fermosa), placidly allowing the insectivorous bawks to pick out the tick-like
parasites ealled garrapatos. This is a favourite occupation of these birds, hence they are well known as garrapateros. In this region the heat is intense, especially during the dry season, when the parched soil cracks into long fissures, in which lizards and serpents lie in a state of torpor. The Orinoco is 1,800 nuiles in length, while the area of its basin is 400,000 square miles. (3) The basin of the Amazon, a vast plain of more than $2,000,000$ square miles, forming a rich soil and humid elimate. It is everywhere covered with dense forests, in which live innumerable wild animals and a few savages, who subsist by hunting them and fishing the waters of the river and its tributaries. ( 4 ) The region of the Pampas. This seetion comprises the great southern plains watered by the Plata and the numerous streams deseending from the eastern summits of the Cordilleras. The Pampas, or South American Prairies, occupy the greater part of this region. They are dry, and in some places barren, but in general are covered with a rank growth of weeds and tall grass, on which feed prodigious numbers of horses and eattle and the few wild animals which can find a shelter in its scanty herbage. (5) The country of Brazil eastward of the Parana and Uruguay, "presenting alternate ridges and valleys, thickly covered with wood on the side next the Atlantie, and opening into steppes or pastures in the interior." The great rango of the Andes, which may be elassed as the southern continuation of the Rocky Mountains, is the chief mour tain system of South America, and extends almost from Cape Horn to the Isthmus of Panama, running approximately in 72nd meridian of longitude during the whole of that immense distance, like the Rocky Mountains, always much nearer the Pacitic than the Atlantic. They thus form a great rampart, having an average height of 11,000 to 12,000 feet, and a width varying from 20 to 300 or 400 miles. "In most places the chain rises to heights of several thousand feet, and upon this chain rest two or three principal ridges of mountains enelosing lofty plains or valleys, separated one from another by mountain knots, which mark the spots where ridges belonging to different systems intersect. In one sense, the lofty plains of the Desaguadero, Quito, aud others are valleys, since they are encompassed by mountains, but in a certain sense they are plateanx, since they form the broad summit of the range or platform on which the bounding ridges themselves stand."* There are three transverse ridges which pass eastward at almost right angles to the main chain, thus forming the three natural areas of the Orinoeo, Amazon, and La Plata basins. They cross the eontinent in the parallels of $18^{\circ}$ south and $4^{\circ}$ and $9^{\circ}$ north. The first, or most northern, is the Cordillera of the coast, which terminates at the Gulf of Paria. The second is the Cordillera of Parime, or, as Humboldt calls it, the Cordillera of the Cataracts of the Orinoco; it divides the waters of the Orinoco and the rivers of Guiana from the Amazon basin, and is covered with magnificent forests. It terminates in French Guiana, at no great distance from the mouth of the Amazon. On a table-land, which forms part of this chain, in about the 67th degree of longitude, the Cassiquiari forms an intermediate channel, which conneets the rivers Orinoco and Negro, so that during the floods a part of one river flows into the other. The third transverse chain is that which extends almost as far as Santa Cruz, in the vieinity of the river Mamore. "South of this range," writes the author of the admirable article we have quoted, "a:c a

[^30]number of ridges having an east and west direction, an averuge height of about 10,000 feet, and terminating in the plain near the Paraguay. This country, which divides the waters of the Amazon from those of the Plata, is a brond plateau of elevated land rather than a distinet mountainous ridge, and consists of low hills or uneven plains with very little wood, presenting in some places extensive pastures, and in others tracts of a poor sandy soil. Its average height does not exceed 2,000 or 3,000 feet above the level of the sea. The mountains of


THE GHEAT "ELEPHANT's EAK" OF COLOMBIA (Begonia magnifica).

Brazil, which are of moderate height and occupy a great breadth of country, form an irregular platenu, bristled with sharp ridges running in a direction approximately parallel to the castern coast, connected by offsets running in a more or less castern and western direction. They extend from $5^{\circ}$ to $25^{\circ}$ south latitude, and the extreme breadth may be about 1,000 miles. Between Victoria on the north and Morro de St. Martha on the south, a range with numerous curves lies a little way back from the coast, and is for the greater part of its length known as the Sierra do Mar. Somewhat further inland is a higher range, the different parts of which have various names, but it is best known as the Sierra de Mantiqueira. It
feet,
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contains the highest peaks in Brazil, amongst which may be mentioned Mount Itacolumi, famous for the gold and diamond-yielding strate in its vieinity ; the Pico dos Orgaos, which is 7,700 feet high ; and Itambe, 8,420 feet. Some of the peaks are believed to be still higher. West of this the uplands of Brazil stretch far into the interior, and at length sink into the great central plain, through which flow the Paraguay and its tributaries. Roughly speaking, the height of the central plains or valleys is from 0,000 to 11,000 feet above the sea; of the passes and knots from 10,000 to 15,000 feet; and of the highest peaks from 15,000 to 23,200 feet, the last being the altitude of Aconcagua in Chili, which is generally considered to be the highest peak in America. Judging from the estimates, we may regard the bulk


A FALM-YALD IN COLOMLHA.
of the Andes as somewhere about that of a mass 4,400 miles long, 100 miles wide, and 13,000 feet high, which is equivalent to $5,349,301,600,000,000$ eubie feet. On this basis we find that the Mississippi would carry down an equivalent mass of matter in 785,000 years. The rate of denudation in certain river basins varies from one foot in 700 years to one foot in 12,000 years. Assuming that similar rates would apply to the Audes, they would be denuded away in from $9,000,000$ to $156,000,000$ years. In all probability, much less than $9,000,000$ years would suffice. On the other hand, the Andes would be swept away in $1: 35,000$ years, supposing that the denuding powers of the globe wesc coneentrated ou them alone. From the above data, and assuming the speeific gravity of the matter forming the Andes to be $2 \cdot 5$, the weight of the portion above the sea may be estimated at $368,951,831,482,750$ tons, giving an average of about 1,000 tons on each square foot at the level of the sea. Under Aconcagrua the pressure would be about 1,750 tons per square foot at the same level, provided, of course, that it were not-as it no doubt is-more or less modified by lateral pressure. How vast, then, must be those forces which have counteracted
such a pressure, and upheaved the ocean-spread sediments of the continent, until the Andes, that

> 'ginnt of the western star, Looks from his throne of clouds O'er hall the world!'
"But however vast the Andes may seem to us, it should be remembered that they form but an insignificant portion of the globe itself. Aconeagua is about $\frac{1}{800}$ th of the earth's diameter, which is relatively not more than a pimple ${ }^{\frac{1}{3} 0}$ th of an inch high on the skin of a tall man."* Among the other great peaks may be mentioned the following :-the Ne lo de Sorata, close to Lake Titicaea, 21,280 feet; the twin-peaked Illimani, 21,181 feet; Sehama, 22,000 feet; Chungara, somewhat less; Chipieani, 18,898 feet; Arequipa, 18,373 feet; Chuquibamba, 21,000 feet ; Chimborazo, 21,424 feet; and the volcanoes: Cotopaxi, 19,500 fect; Sangay, Tunguragua, Carguirazo, Sinchulagua, Antisana, and Cayambe, the last of which ( 10,534 feet) is extinet, and stands just on the equator. $\dagger$ These voleanoes-of which the most southern active one is Corcovado, in latitude $43^{\circ} 10^{\prime}$ south-number about twenty, but of these some eight are not now active. With the exception of the Moluceas, no region in the world has so suffered from earthquakes as South America, though these, both in frequency and activity, are chiefly concentrated along the western slope of the Andes. In Peru they are most frequent, least so in Bolivia, Brazil, and Patagonia, but to an unhappy extent in Ecuador, Colombia, Venezuela, and the Guianas.

South America is also remarkable for its great rivers, the chief of which are, from north to south, the Orinoco, the Amazon, and the Plata; though there are many others of vast extent navigable for long distances, and tributaries of all the great rivers which in themselves constitute immense waterways, such as are not found in Europe, and with a very few exceptions in Asia or Africa. Take an example: The Amazon is navigable without a rapid for 2,000 miles to Jaen where the stream is only 1,240 feet above the level of its estuary at Para. Its volume is equal to eight of the principal rivers of Asia, while the Plata most probably discharges more water than all the African rivers combined. It is needless to say that the potentialities of these rivers for inland navigation are great; and though at present the sparse population of the country and the backward state of commerce render them of comparatively little use, there cannot be a doubt but that at no very distant period they and their tributaries will be covered with thousands of steamers conveying to and from the sea the traffic which will grow up in the fertile valleys through which they flow. "The estuary of all these great American rivers opens to the eastward, and thus Providence seems to have plainly indicated that the most intimate commercial relations

[^31]of the inhabitants of America should be with the western shores of the Old World. It should, at the same time, be observed that the position of the great rivers of Ameriea is but one example of a physical arrangement which is conmon to the whole globe, for it is remarkable that in the Old World, as well as in the New, no river of the first class flows to the westward. Some, as the Nile, the Lena, and the Obi, flow to the north; other, as the Indus, and the rivers of Asia to the sonth; but the largest, as the Volga, the Ganges, the Yang-tse, the Hoang-Ho, the Euphrates, and the Amoor, have their courses to the east or south-east. This arrangement is not accidental, but depends most probnhly on the inclination of the primary rocks, which, in all eases where their direction approaches to the north and south, seem to have the steepest sides to the west, and the largest declivities to the east. We have examples in the Scandinavian Alps, the mountains of Britain, the Ghauts of India, the Andes, and the Rocky Mountains."

As in North America, there is a wide difference between the two sides of South America. On the west the Guayaguil (p. 92) is the only river of any importance, and even it is scarcely comparable with the rivers of Brazil and Guiana. On the west, north of Chili, thero aro only two harbours-Guayaquil and Panama-worthy of the name; while in the east there are many, exclusive of the mouths of the many great rivers which flow into the Atlantic, and which virtually form a great network of canals through which the commerce of the world can be carried all over the continent, and even into Pertn, which borders the Pacific. America is thus fitted fur commerce before all the rest of the world. A third of the rivers of Europe and Asia flow into the Arctic Ocean, or into land-locked lakes, like the Aral and Caspian, and thas, even should the discovery that for three months in the year the mouths of the former are accessible from Europe prove to be well founded, they are to a great extent lost to commeree, owing to the ice which forms on them and in their vicinity. America possesses only one river of consequence-the Mackenzie (Vol. I., p. 190)—which is in the same situation.

## Colombia.

The "Estados Unidos de Colombia" were formed out of the nine states known prior to 1801 as New Grenada. Their history is that of the other Spanish republies, in so far that revolution, varied with anarchy and assassination, has, unfortunately, been too frequently the main incidents in the record of Colombia's career since it broke off from Spain in 1811. Up to 1824 it waged war against its stepmother, though before that date the elements of dissension and disintegration had entered the country, and gradually disrupted the republic of Colombia which Bolivar formed in 1819. In 1829 Venezuela withdrew from the union, and in 1830 Ecuador followed her example. In 1831 the republic of New Grenada was formed, and almost as soon civil war began and lasted at intervals, during which various states seceded, only after a time to return to the Federal fold. From 1843 to 1853 the country enjoyed comparative prosperity. But in the latter year the constitution was so amended that to every state was given the right of seceding, and of entering into merely Federal relations with the Central $\lambda e p a b l i c$. Some states took advantage of this permission, and civil war followed in due course. This lasted up to 1861, when the present constitution was promulgated; and though it cannot be said that for any length of time the country has been
entirely at peace, yet no rebellion during the last seventeen years has been so far successful as to break up the country into its component members. This may be a small subject for congratulation, but in South America the hopes of the historian get chastened by many disappointments. The present republic consists-in addition to six territories-of nine states: Antioquia, Bolivar, Boyaca, Cauca, Cundinamarea, Magdalena, Panama, Santander, and Tolima. ${ }^{\circ}$ Of these the largest is Cauca (257,462 square miles), and the most thickly populated Boyaca (482,874) ; Santandar (425,427); Cundinamarea (409,602) ; and Antioquia (365, 974 ); the whole area of the country being 504,773 square miles* (or more than double that of Spain and Portugal), and the population by the last census (1871), $2,950,017$. Probably at the present

time the population exceeds three millions, of which 100,000 are uncivilised Indians. About 330,756 square miles are north of the equator, and the rest south of it. Its revenue averages about half a million pounds per annum, while its expenditure is usually less. However, in 1877 they stood respectively at $£ 622,924$ and $£ 555,882$; but the foreign public debt was in the same year over $£ 2,000,000$, though it is in some authoritative documents stated at a zauch higher figure. The interior debt was in the same year over $£ 1,000,000$, the imports from Great Britain £783,183, and the exports from the same country $£ 681,013$, which is much less than ordinary. The Isthmus of Panama, already described, is, though not the most populous or largest, yet the most important of the Colombian states, but none of the towns are of great importance, and less than a tenth of the whole country is under cultivation. The city of Panama has 18,378 inhabitants; Santa Martha, 3,500; Cartagena, 7,800; Socorro, 20,000; Medellin, 30,000; Tunja, 8,000; Bogota (the Federal capital), 50,000; Ibague, 13,000 ; and Popayan, 16,000 . These towns are the capitals of the different states.

[^32]cessful ject for many states: r , and pulated , 974 ) ; Spain present

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It would be unjust to Colombia not to point out that, notvithstanding its many troubles, it holds a high place among the South American Republics for the care bestowed on national education. In 1875 there were 2,113 public schools, with 126,000 pupils, with sixty colleges and seminaries for higher and professional instruction, the total sum voted for national education being in that year about $£ 220,000$. Perhaps it was not all spent, and, indeed, there are tales of professorial salaries unpaid, but even a will to edncate the people must be counted for something in these latitudes. In 1873-74 the post-office conveyed 358,254 letters, which gives a fraetional correspondence per head to the Colombians. The chief products of the country are those derived from its extensive forests, such as mahogany, cedar, fustic, and other dye woods and medicinal plants, while gold, silver, copper, platinum, lead, precions stoncs, and even coal, are among tho mineral riches of Colombia. Tobaeco, coffee, cocoa, plantains, indigo, wheat, and other cereals, are the chief agricultural crops. Its manufactures are, however, insignificant, woollen and cotten stuffs for home use being almost the only ones of any note. The great plains pasture enormons herds of eattle, from the flesh of which jerked beef is extensively prepared, while the hides form an even more lucrative article of commerce to the ranckeros. In 1875 £632,017 worth of gold and silver were exported, £5 43,128 of tobaceo, $£ 36[2,349$ of cinchona bark, $£ 146,158$ worth of coffee, $£ 29,997$ worth of india-rubber, over $£ 34,000$ worth of copper, \&e. After the comparatively full account which we have given of the State of Panama in a former chapter (pp. 49-58), and of the state of society generally in the neighbouring conntries, it is nunecessary to occupy much space with a description of either Colombia or of the neighbouring republic of Ecuador. The three great spurs or ranges of the Andes, known as the Western, Central, and Eastern Cordilleras, intersect the whole country ; the last-named, which is the largest, containing a number of extensive, cool, and healthy table-lands. That portion known as the paramo of Cruz Verde has an elevation of 11,695 feet. The Eastern Cordillera in its passage through the State of Santander attains in the Alto de el Viego a height of 12,965 feet; in the Alto de el Trio of 9,905 feet; and in the Boea del Monte of 12,735 feet. The Sierra Nevada is covered with perennial suow over a great part of its summit, so that the general report that it reaches a beight of 23,779 feet may possibly not be an exaggeration. The llanos of the Orinoeo we have already spoken of. As far south as the Vichada they form on almost unbroken level of treeless plains, but farther south the forests encroach on them, and in places hillocks, rising to the height of from 300 to 600 feet, interrupt the dead level of these flat lands of the equator.* The seenery of Colombia is, as might be expected, from such a land of river, mountain, forest, and lake, grand in the extreme. One of the most remarkable of the "show places" of the country we have engraved on p. 81. It is the Waterfall of Tequendama, formed by the precipitation of the water of the Rio Funza, by one bound, over a precipice 47 , feet in height. It is situated not far from Bogota, and quite deserves the designation which

[^33]oubles, ved on pupils, all sum it was eveu a s. In ndence rom its plants, ng the 1 other woollen t plains cepared, II 1875 inchona orth of Panama bouring olombia of the ountry ; healthy 95 feet. be Alto 3oca del a great et may ff. As farther $f$ from scenery st, and of the by the feet in which
M. Edouard Andre applies to it, namely, that of "one of the greatest wonders of nature in South Arnerica." In the vieinity of the Fall are found a profusion of ferns, and the great flowered Begonia, figured on p. St.

## Ectador.

From the ruins of the republic, established through the exertions of Bolivar, arose in 1830 that of Ecuador-literally the Equator-or, as it is sometimes called, Quito. It is needless to recount its history : the secession of a state, the pacification of another, the election of onc President and the pronunciamiento of his unsuccessful rival, a revolntion and an earthquake, a frothy proclamation promising all the grood things in all the best constitutions which the world ever saw, followed by religious despotism, political terrorism, and a crushing censorship of the press, and finally by the assassination of a President, are among the many things which a student of Ecuadorian history is apt to consider. the most striking points which remain in his memory after a perusal of its rery coufused chronicles.

The boundaries of Eeuador are so imperfeetly marked out that the estimate of its area varies from 127,205 square miles to 215,550 , inchuding the Galapagos Islauds, an minhabited group in the Pacific (containing 2,951 square miles), which are dependencies of the republic.* The population can only be equally vaguely stated, but probably the estimate given by the Minister Leon in 1875, viz., that, exclusive of about 200,000 wild Indians, the population was at that date $866,137, \dagger$ is as correct as any that can be quoted. The mountains of Eeuador form its most interesting feature, the great chain of the Andes traversing it from north to south, its two Cordilleras running parallel to each other, "and enclosing an elevated longitudinal valley abont seventy miles wide and 300 miles long, which is divided ly the transverse ridges, or mutlos, of Tiupullo and Assuay into the three great basins of Quito, Ambato, and Cuenca, whici are again sub-divided by inferior ridges into irregular sections." In the Eastern Cordillera several of the peaks attain a height of 18,000 feet, while in the western one Chimborazo is the only one which exceeds 17,000 feet. The plain on which the capital-Quito-is built exceeds 9,000 feet in height, while Ambato is at 8,500 , and Cuenca at 7,800 , the two latter being comparatively barren, but the country round Quito is "clothed with luxuriant vegetation." In the Eastern Cordillera, Imbabura attains a height of 15,029 feet, and is famous for its eruption of mud and water, though the old tale that fish have also been thrown out is said by later historians to have been founded on miseonception. Cayambi ( p .86 ) is the only snow-capped mountain in the world whieh is situated exactly on the equator. Antisana ( 18,500 feet) appears at one time to have been an active volcano of the first magnitude. It is now extinct, though smoke was seen to issue from it in 1502 . Sincholagua and Rumiñagui are respectively 16,360 and 15,603 feet in height. But all these pale into insignificance before Cotopaxi, the iftiest aetive volcano in the world. It is situated thirty-five miles south-south-east of Quito, but was scaled successfully for the first time in 1872 by Dr.

[^34]Reiss, and in the following year by Dr. Stübel. The north-east peak is 19,498 feet above the sea, and that of the south-west peak 19,429, the snow line on western and southern sides being respectively $1 \mathbf{5}, 180$ and 15,174 feet.* Only the east side is covered with snow, the action of the trade winds denuding the western slope of its white covering. "Ca the southern slope," writes Mr. Webster, "at a height of 15,059 feet, a small cone, called el Pecacho (the beak), or Cabeza del Inca (the Inca's head), lifts its bare cliffs for above a thousand feet, and from its general appearance gives some show of reason to the tradition which regards it as the original summit of the mountain blown


ON THE RIVER GUAYAQUIL, ECUADOR.
off at the first eruption in 1532. The present summit is usually enveloped in clouds, and even in the elearest month of the year it becomes visible only for eight or ten days." Wagner describes the wind on the Tacunga plateau as usually meridional, generally blowing from the south in the morning, and frequently from the north in the evening; but that from the summit of Cotopaxi the north-west wind always prevails during the day. The gralually widening voleano cloud continually takes a south-western direction over the rim of the crater ; at a height, however, of about 21,000 feet, it suddenly turns to the northwest, and maintains that direction till it reaches a height of at least 28,000 feet. There are thas, from the foot of the voleano to the highest level attained by its smoke cloud, three quite distiuct regular currents of wind. $\dagger$ El Altar, another old volcano, is made up

[^35]feet and pvered white eet, a s bare ow of blown
of eight snow-eovered peaks, the highest of which is 17,735 feet, Chimborazo, "the Mountain of Snow," is 20,097 feet high,* and though imposing from any point of view, can be best appreciated as seen from the Pacific: as yet its summit has never been reached, the highest point attained being 19,682 feet, at which elevation Boussingault and Hall had to bridle their ambition in 1831. Carahuairazo, in the immediate vicinity of Chimborazo, is $16,7.48$ feet, and Quiratoa, further north, 13,510 feet. Its crater is said to be filled with a great lake, as not unfrequently is the ease in the extinet voleanoes, and it is

oatheming cinchona baik in ectadom.
asserted that the surface of it has very frequently been covered with flames. The only other peaks of Eeuador which we need mention are Llanganate, $17,84.3$ feet, Tunguragua, 10,685 feet, Ilinoza, 17,395 feet, Corazon, 15,793 feet, Atacazo, 16,000 feet, Piehincha, 14,984 feet, Cotoeaehi, 16,288 feet, and Chiles, 16,200 feet high. Most of these are either active or extinet voleanoes. The eruption of Pichincha in 1566 covered Quito three feet deep with ashes and stones, though the erater having been broken down the western side in the eruption of 10ic0, most prolably the capital will be safe from any future eruption of this magnificent, but somewhat too active, neighbour of the Quitonians. Eeuador is divided into three departments and eleven provinees. A university exists at Quito, and there are colleges in several towns,

[^36]but education is at a low staud, and as the power of the priests is still strong, religious toleration and freedom of thought are not in a condition that call for any superfluity of enthusiasm. In the extensive forests grow the valuable cinchona trees, which yield the Peruvian bark, gathered by the Ciscarillos (p. 93), who are so recklessly destroying the tree that, aceording to Weddel, Spruce, Markham, and Cross, they will soon exterminate it, when the world will become dependent for its quinine on the plantations now flourishing in India and Java. Cocoa is the chief crop, but coffee, cotton, orchilla weed, straw hats, yams, tobacco, fruits of various kinds, sarsaparilla, wheat, india-rubber, many gums and medieinal substances, \&e., are exported. Gold, quicksilver, lead, iron, copper, and emeralds, not to mention the abundant banks of sulphur sent out by its superabundant voleanoes, are among the mineral products of Ecuador. The finances of the country have long been in such a coudition that only a vague estimate can be arrived at in regard to the weighty matter of income and expenditure. In 1876 the former is reported to have amounted to $£ 331,000$, and the latter to the unhealthy sum of $£ 480,000$. In 1877 the Republic owed $£ 3,274,000$. Ecuador does comparatively little trade with Great Britain, the United States monopolising nearly all of this, whieh again almost centres in the port of Guayaquil. In 1876 England received £2 4,517 of Ecuadorian prodncts, and sent the Republic $£ 225,273$, which was much more than the average of previous years, and of this, cotton goods formed the staple, while cocoa and Peruvian bark, with some dyc-stuffs, comprise the chief of our imports from Ecuador, a country which nature has fashioned on a magnificent scale, but which man has done poorly by. Quito, the capital of the Republic, is one of the most remarkable cities in the world, in so far that it is situated at a height of 9,192 feet above the sea. Here the climate the whole year round is one perpetual spring. The scencry of the snowcapped mountains in the viciuity is magnificent, and there is no more charming region in the world than the lovely gardened valley of Chillo, to the south of the eity. The best houses are built of stone; the others of adobe, or sun-dried brick, roofed with tiles. Quito is, moreover, a most religious eity. Convents, monasteries, and churches alround, and the cathodral is one of the finest of those in the northern part of South America (p. 96). In 1859, the great earthquake nearly destroyed the town. But it has now recovered this disaster, and has at present a population numbering from 35,000 to 80,000 . Mr. Webster, to whose excellent account of Ecuador we have been much indebted, thus sums up the state of the roads they have in the country, and with this we shall conclude our brief sketch of this South American Republic:-"Artificial means of commmication are still for the most part in a very primitive condition, thougl. few countries have so little reason to be content with the natural highways by land or water. Many of the roads even between important centres of population are mere mule-tracks, altogether impassable in bad weather, it may be for weeks or montles at a time, while the violent torrents which have so frequently to be crossed often present nothing better than more or less elaborate bridges of rope similar to the jhuter or zampur of the Kashmirians. The simplest of these is the tararita, consisting of a single rope, with or without a travelling rope, by which the passenger or his luggage may be hauled across. The most complex is the chimba-chica, a rude prototype of the regular suspension bridge, construeted of four or five ropes of agave root fibre, supporting transverse layers of bamboos. The ity of di the a tree when India bacco, ances, ndant ducts nly a xpel1er to does $y$ all eived more while from man cities Here nowegion best tiles. sund, erica now , 000 . thus slude ation e so the ther lent nore ans. at a nost cted The
best are hazardous to all except a practised foot, and they get out of repair in a few years. Since the middle of the century something has been done to improve this state of affairs; and a very great deal more has always been about to be done. According to Moreno's address to Congress in 1874, Ecuador had at that time 30 miles of railway, nearly 300 miles of cart road, with substantial bridges, and abont 250 miles of roads fit for the ordinary mule traffic of the country. Wheeled conveyances are almost unknown, especially in the inland districts, the transport of goods of every deseription being effected by porters or mules. The first carriage was introduced into Quito in 1859, and the owner had to pay a tax for his innovation." *

## CHAPTER VII.

Vevezcela and tie Valley of tie Oinnoco.
Arter a traveller has passed long enough time in Central America, or in Eeuador and Colombia, to learn abont one-half of what has been told the reader in the preceding pages, he will undoubtedly have for the time being had enouglh of it. He will long for a life more exhilarating, and for a climate just a little cooler. Brown faces will have grown tiresome to him, and the most combustible of very young men, after enduring the society of mosquitocs and all the other attendant evils for six months at a streteh, will have grown blasé to Señoritas of the Castilian or any other race. He will weary for England and English fogs. A Vermont pine forest wili be in his eyes more lovely than all the glories of the tropics, and a sandy flat in North Germany, with the simple boors who vegetate on it, a more charming bit of scenery than any pampa of the south, where lithesome horsemen drive their beeves, lean, sinewy, and unwholesome, through the quivering hot air of the equator. But he will come back again; they always come back again to these wild countries, unless, indeed, death, disease, filthy lucre, a wife, or some such irresistible persuasive keep "at home" the enthusiast who has once tasted of the bittersweets of these lands. We are in that condition: so let us return, as the cicerone of the reader who wishes to gain a glimpse of the countries lying scuth of Colombia. We are bound for the Republic of Venezuela and the Valley of the Orinoco, and may probably, like the buecancer of the sea-song, bring up at "La Guayra upon the Spanish Main," a very hot town celebratel in ballad and story. We have passed Sombrero, or Hat Island, a flat rock twenty feet above the sea, and a feov hundred yards long, at one time inhabited only by black lizards and sea-fowls, and where it was difficult to effect a landing except, to 'fuote the sailing directions, "under very favourable circumstances, by watching an opportunity and jumping on a flat ledge to the eliff, and with some diffieulties ascend to the summit." But a prying

[^37]
soal found that the sea-fowl had left posterity a legacy as pay for their footing, und accordiugly until lately, Sombrero was "quoted" in that odorous world whieh concerns itself with guano and other fertilisers.

Next we are at St. Thomas, and not improbaily will be glad to quit it, though
it is the central figure in that group of isles which Columbus named in honour of the eleven thousand virgins of sainted but apocryphal memory. The islands to the east of St. John-which are the near neighbours of St. Thomas-are " ours;" those to the east own the rule of King Christian of Denmark. Should any one be in doubt amid so mixed a political medley as to what ought to be assigued England and what to any other power, he 93
has only to ask the name. Then, as some one remarked, you will know the English islands by the roughness of their nomenelature, and their utter want of sonorous terminology. There are no French or Spanish "kickshaws" in John Bull's geographicul menu, only the plain roast and boil of the cartographical world. Here, for example, is Salt Island, followed by Ginger, Cooper, and Beef Islunds, or by Serab, Guano, and Jost-van-Dykes Isles. We are now passing Anegada, or "Drowned Island," infamous for shipwrecks, and dreaded of mariners. Once on a time the bay swarmed with buceaneers, and when these piratical hunters of wild eattle and driers of their flesh were among the things that had been, wreckers came and colonised the island. Ostensibly they reared cotton and cattle; actually they breathed morning, noon, and night, like the Cornish men of last century, a silent prayer that Providenee would be pleased to send a well-eargoed vessel thitherward on the long ninemile reef, which stretches to the south-east of this isle of evil fume. On the island is a fumel-shaped well full of fresh water, which curionsly enough rises and falls with the tide. There is here a strong westerly current. Mr. Enstwiek mentions a fact which I recollect being told when passing it, by probably the same informants, that the fishermen at Anegada find sufficient cork, drifted to them from the coast of Spain, to supply their nets with floats. Bottles, too, launched in the river Gambia in Africa have been picked up on the Virgin Islands. Between the islands themselves the currents are in many places so violent, that to row a boat from island to island is a dangerous and often all but impossible undertaking. Many small eraft have been swept away, and the crews drowned in the attempt. Between the eastern part of St. Thomas and the Isle of St. John thero is a furions eurrent, and the waves rise in such huge surges, that when the southern tide is in its strength, it would be impossible for any small vessel to encounter that terrible sea.

Westward still is the Virgin Gorda-which being translated is "Fat Virgin"in truth a fruitful damsel, for she suphorts some thousands of people sumptuously on the produce of her rum, sugar, tobaceo, and copper. It is even whispered that gold, silver, and "other minerals" have been found among the treasures of this portly virgin. Then there is Tortola, with a cluster of isles in its vicinity forming a fine archipelago, where, some enthusiasts deelare, all the navies of Angland might ride in safety-that is, if they desired to ride in any such place.* This island, like St. Thomas, is suffering from drought, owing to the inhabitants improvidently cutting down the trees that at one time clothed the hills, which in the latter island run throughout its whole length. But St. Thomas, besides the want of water, suffers from yellow fever, which is almost as bad, especially as the water is at the best of times not good, thongh the inhabitants rarely drink any except in the form of iee in their sherry ecbblers, and the iee comes all the way from Boston, a place much lauded in hot weather, especially under the cool arches of the Ice Ilouse in the main street of Charlotte Amalie (Vol. II., p. S05). Then there is Santa Cruz, thirty-two miles south of St. Thomas, but healthier, though flatter; and farther on the way

[^38]is Ochilla, one of the Isles of Aves, a very noted place in the guano trade, anid not unknown to remance for
> " ". such a port for muriners I no'er shuil see ngnin, As the pieneunt Isle of Aves, bevide the Njunish Main;

> Oh, tho palms grew high in Aves, and fruit thut slene like gold, And the colebris nul purrots, they werv gorgeous to beloold; And negro maida to Aves from bondago fast did fleo To weicomo gallant sailors $n$-sweeping in from sea.

> If I might but lie a sen-dove, I'd fly across the Muin, To the pleasant Isle of Aves, to look at it once again."

So said-or sung-the "Last Buccaneer," in Charles Kingsley's lay. Eighty miles south of Ochilln lies La Guaym, and La Guayra is iu tho Republic of Venezueln.

But long before that odorous apotheosis of dulness comes, as an unbeatitic vision to the voyager's eyes, the most prominent feature in the lindscape is La Silla, "the Saddle," the mountain which overhangs the town. It ean be seen at sea seventy or eighty miles distant, being 8,600 feet high, and the loftiest elevation between the coast and the Andes. It is the pleasantest feature of La Guayra, albeit this is one of the most pieturesque towns at a distanee, and one of the hottest on earth near at hand, in all the world. Seaward the breeze brings us odours of Araly tho Blest-spico-laden winds I used to believe them to be, but at one-and-twenty imagination often runs riot with renson. At all events, La Guayra is, except in hot weather (which is always), not an unpleasant place to bring up in, that is to say if the visitor is partial to mixed smells, and careless of the nameless whiffs which father yellow fever. Ilowever, the outside of the town makes up for the diagrecableness of its inside. It is the port of Caracas, a mysterions thing to mariners, for it is an open roadstead, and when the northers blow a cannon is fired as a signal for the ships to weigh their anehors and run out to sea, lest a worse fate befall them. Yet a mile or two to the west, on the other side of Cape Blanco, there is a snug harbour called Catia, from whence an easier road might be made to Caracas than the present one from La Guayra. "But no," writes the Commissioner for the Venezuelan Loan of 1861, "in spite of the swell which has eaused the loss of so many vessels, which makes communication with the shore troublesome, and which stirs up the sand in a fashion that renders it necessary to weigh anchor every eight days, lest the ship should become sandlocked, in spite of the ravages of the ship-worms-the terelo navalis-lit broma, as the Spaniards call them-more destructive at La Guayra than anywhere else in the world, commeree, which seems the only conservative thing in America, still keeps to its old route." Thers is no town which can be compared with La Guayra, unless, indeed, it be Santa Cruz, in the Isle of Teweriffe, which also lies at the foot of a great peak. La Silla appears rising, as it were, direct out of the sea, as if, to use Humboldt's words, "the Pyrences or the Alps, stripped of their snow, had risen from the bosom of the waters." The town is excessively hot, a fact which may be realised when we say that the temperature of the coldest month in the year is four degrees centigrade higher than that of Paris at its
hottest, though when one is in those parts the conclusion usually arrived at is, that the last place visited is the warmest yet experiencel, a state of belief in which the martyr remains until he visits aucther town, when he modifies his faith so filr as to come to the conclusion that this furnace is surely more torrid by some degrees than the one he has left.

## Statistics and Pifsical Features.

Venezuela is entirely tropical, and is misnamed. It has nothing at all of Venice about it, and even if it had, is not "little Venice," as its name signifies, for a region full of piled-up mountains as great as the $\mathrm{Al}_{\mathrm{p}} \mathrm{s}$, containing forests larger than France, steppes as great as those of Gobi, and an area altogether four times that of Prussia, can have little in common with the pieturesque city on the Adriatic. But like many other designations, that of Venezuela originated in a mistake. The conquistadores, when they first visited it, found the Indians of the shallow "Lake" of Maracaibo living in "lake dwellings "* -huts built on poles in the water. This suggested a likeness to Venice, and hence the name and the misnomer. The history of the republic need only be given briefly, for in its essential features it is that of the other Spanish American countries which we have had oceasion to touch on and may have yet to deseribe. Its independent life dates from 1830, when the Confederation formed by Bolivar broke in pieces, and its present constitution is, to a great extent, that of the United States, though, as if to better provide for casy revolutions, rather more laxity or liberty is allowed to provincial and local governments. Since 1817, there has been almost continuous civil war-the federalists desiring a strong central government ; the confcderalists the greatest possible independence of the twenty-one states; the leaders of both parties, power and pelf. On that particular point they have hitherto displayed vemarkable unanimity. The area of the Republic is estimated at 403,261 square miles, and the population, by the last census (1873), at $1,784,197 . \dagger$ The ehief cities are Caracas (the capital, $\mathfrak{p} .97$ ), 48,897 ; Valeneia, 28,594 ; Barquisimeto, 25,664 ; Maracaibo, 21,954; Maturin, 12,944; Sain Carlos, 10,420; Merida, 9,727; Cumana, 0,427; Ciudad Bolivar, 8,486; Coro, 8,172 ; Barcelona, 7,674 ; and La Guayra, or Guaira, 6,763 inhabitants, in addition to about $2 \neq 000$ foreigners fesident in, or passing through, the country. Of the States, Guayana is the largest, but Guarico is the most thickly pop,ulated. There are, in addition, three territories organised on the principle of those of the United States. The Custom House, which is the clief source of revenue, yielded, in $1875, \mathfrak{f} 690,000$, while the national income in the same year was $6,702,080$ venezuelanos, or $£ 1,340,416$, and the expenditure $£ 1,228,626$. The publie debt is somewhere about $£ 20,000,000$, of which about $£ 7,000,000$ is due to foreigners, chiefly Englishmen, but on this the interest is never paid with any regularity, or, indeed, even when paid, to the full amount promised on the bonds. The financial affairs of the nation are in a lamentable condition, internal wars, and the support of a

[^39]that the e martyr me to the left. llings "* ence the for in its have had tes from stitution for easy rnments. rentral e states; hitherto re miles, Caracas 21,954; ; 8,486 ; lition to Fuayana n , three House, income 28,626 . due to ularity, inancial rt of a

large army and militia completely disordering the affairs of a country never very orderly or very ready or able to meet its obligations. The total commerce of Venezueln was, in 1875 , valued at $31,000,000$ venezuelanos, or about $£ 6,200,000$, the exports exceeding by nearly $\mathfrak{f} 215,000$ the imports. Cocea, cotton, sugar, indigo, dye-woods, \&c., are among the chief exports, cocoa and coffee figuring in the first rank, though ores-chiefly of copper-and the precious metals are also among the articles which Venezuela sends to foreign countries. The chief export trade is with Germany and the United States. It imports mainly from the United States, France, and England. But wit: Great Britain the Venezuelan export trade is trifling. In 1575, for example, only £37,130 in goods were sent to England, while the imports ( $£ 733,404$ ), which were less than those taken from the United States or France, were almost exclusively on account of German houses, which now monopolise the trade of Venezuela. In 1876, the exports had increased to $£ 54, \mathrm{S78}$, but the imports had fallen to $£ 679,163$. This is infinitely less than should be expected from such a country, lying within the tropics, having one of the richest soils in the world, abounding in all kinds of mineral and vegetable riches, and possessing a climate which ranges from that in which perpetual snow is capable of lying, down to the greatest heat which the thermometer records of comntries inhabited ly civilised mon. The great range of the Andes runs through it from north to south, forming its westurn limits, and from this cardinal chain there branches, as already noted, three tributary spurs gradually diminishing towards the east until they are lost in the wide plains of the Apure and Guayana. Yet these smaller sierras are by no means of minor mportance. That which begins at Merida possesses peaks which tower to the height of 15,798 feet above the sea. The sierras to the north of it are separated from the Andes by the Great Lake, or Gulf, of Maracaibo, the area of which is 6,300 square miles. The most northern of these, namely, that begimning in Coro, runs seaward, and is apparently sulmerged, for it again reappears in the islands of Tortuga and Margarita. As might be expected, all this region is watered by innnmerable streams flowing from the Andes and from the sierras mentioned, and unite to form the great river Orinoco, which bisects Guayana, and as it passes Ciudad Bolivar pours, according to Codazzi, even when at its lowest, " $a$ flood of 240,000 eubic feet of water per second towards the oeean, or as much as the Ganges wings down when at its highest." There are thus in Venezueia three great regions, according to the elassification of Colonel Codazzi, its best orographer. First, there is the alpine region of the Andes, which lies between 6,000 and 15,900 fect above the level of the sea. In this region are the Páramos, or Cold Deserts, where an icy and furious blast chills the blood. During the eivil wars whole regiments have perished in attempting to cross these wastes. Yet at the foot of the mountains are immense woods, in which the cacao tree (Theobroma) grows wild. In this region, too, are the sabinas, or plains of the Barinas, surrounded by an amphitpeatre of hills, which rise in suceessive stages. At the summit of each stage are table-lands that might be cultivated. There is no population, however, save in the centre. There coffee, potatoes, wheat, barley, and most of the cereals and legumes of the temperate zone are grown.

The second region, which begins at a height of 1,800 feet above the sea, is that of the Cordilleras, or mountain-chains, which run parallel to the coast. Among these chains
are the rich valleys of Fui, Araguas, and Valencia, and here in the deep black mould of marvellous fertility grow the crops of coffee, cneoa, maize, cotton, indigo, sugar-cane, yucea, and plantain, which make Venezuela known to the markets of the world.

The third region into which Codazzi divides his native country is that of Parima, or Guayana. In shape it resembles a great convex dish, "elevated and corrugated by lines of hills which are sometimes regular, sometimes broken by gigantic rocks, covered with grass, or bare, and in the shape of pyramids, towers, and ruined ramparts." This is the great region of virgin forests, of which there are here alone 0,104 square leagues. Besides the vast sabinas (or savannas, as they are more familiarly called) of Apure, there are pastures thus described by Don Ramon Paez:*_"They are characterised by a luxuriant growth of various grasses, which, like those of the Portugueza, preserve a uniform verdure throughout the year. These grasses, some of which are soft and pliable as silk, are most inportant in the economy of cattle-breeding. The prodigious increase of animals in these plains is owing mainly to the superiority of the pastures over the llanos, whence the farmer is compelled to migrate with his stock every summer. There are three varieties of grass which in richness of flavour and nutrition can hardly be surpassed by any other fodder plants of the temperate zones. In the early part of the rainy season the gramdilla, a grass reaching to about four feet in height, with tender suceulent blades and painicles of seed, not unlike some varieties of broom-corn, starts with the earliest showers of spring. It grows with great rapidity, and is greedily sought by all ruminants, but being an aunual, soon disappears. In the allavial bottom-lands, subject to the periodical inundation, two other grasses, no less esteemed for their nutriment, have an uninterrupted growth and luxuriance, whieh the hottest season camot blast. These are the carretera, named from the beantiful prairie goose that feeds on it, and the lambedora, so termed on account of its softness." These sabánas form part of a great plain which stretches away for a thousand miles to the foot of the Bolivian Alps, though not unbroken, for in the midst of it rises a plateau called the "Mesa" of Guanipe, the height of which above the sea varies from 870 to 1,392 feet, though around it are many secondary phateaux, from which issue tiny rills of water, which do not sink into the soil, as the traveller when he first sees them showing thenselves from beneath the palm-trees might suppose would be the ease. "Far from being lost, they grow and grow till they become streams, aud then uniting, form rivers. In faet, the whole land is full of springs, and the malp iudicates the course of one thousand and sixty rivers, all navigable, of which seven are of the first class, thirty of the second, twenty-two of the third, and nine hundred and sixty-three of the fourth." $\dagger$ Codazzi divides Venezuela into three zones-the agricultural, pasture-land, and forest zones. The first could support seven millions of people; the pasture-land is of course less thickly occupied, and its economic return is naturally limited by the herds whieh each individual grazer may put on it; last of all is the forest zone, of which only a moiety has been cleared, and the area is not likely to be greatly increased for some time to come. Yet of its area of 18,214 square leagues, 3,000 are classed as hilly, on which sheep might graze; 797 as sabánas, fit for eattle; 12,000 as

[^40]dense virgin furest; and, with the exception of about nine or ten leagues which are cleared, the rest consists of steep mountain or lake. This zone is capable of supporting sixteen millions of people. Of the twenty-one provinces and three federal territories it is only necessary in this sketch to notice at any length that of Guayana, which is not only the largest, but the most important of the political divisions of the Republic.

The Orinoco Valley.

Far away in the Sierra Parime rises this great river, but as yet its sources are a mystery; for the aborigines, driven to the wall, and cowed into submission on the lower reaehes of the Orinoco, still maintain their own on its upper waters. Other tribes, who consider themselves guardians of the upper waters, are the Guasicas, who have hitherto been so suceessful in their resistance, that the exact sources of the Orinoco are yet among the mysterics of geography. The river is joined by many tributaries, but the length of its main course cannot be less than nearly 2,000 miles. Of this distance it is uninterruptedly navigable from the sea to the point where the Apure joins it, a distance of 777 miles, when a number of "raudals" or eataracts bar the way to vessels, though these onee passed, the depth of water, and the smouthness of the river, allow of navigation for many hundreds of miles more. Altogether, according to Wapprius,* the Orinoco is joined by 133 streams, which are entitled to the appellation of rivers, and by upwards of 2,000 others of a smaller volume. These drain an area of 650,000 miles. The delta begins to form 150 miles from its mouth, at a point where a branch flows north to the Atlantic. Several of the months are navigable, but the main chamel is usually considered the Boea de Navios, whieh is divided by a mumber of islands into two channels, each of which is two miles in breadth. The town of Bolivar, : 20 miles from the sea, marks the limits to which the tide reaches. Here the river is four miles wide, and usually about 390 feet deep. On the upper water of this Venczuelan flood the scenery is varied, owing to the elevated charaeter of the enuntry, but from eataracts downward to the mouth, the landseape on either side is extrenely monotonous, consisting as it does of llanos on the left bank, and dense forests on the right. The Orinoco, therefore, though not a river of the extent of the Amazon, yet vies with it in its capabilities as a highway of commerce. By it and its tributaries the continent might almost be crossed, while southward the Casaquiare, which is navigable almost to the Amazon, gives an inlet from the coast of Venezuela right into the heart of the great empire of Brazil. The navigation of this stream will in some future age become a busy industry. Already it is large, but nothing to what it must attain to were the resources of the country on either side of the current sufficiently developed.

## States of Venezuela.

Through the State of Gnayana this mighty river flows. In 1873 the population of the province was given at $34,0=3$, and its a:ea at 208,369 square miles. It is thus, though
by no means the most thickly populated district of Venezuela, yet intinitely the largest of all the provinces into which the Republic is divided. It is also one of the

the mhita palm (Mauritia fevuoba) of trophidl amehica.
richest. Cotton grows wild, the forests abound in fine dye and cabinet woods, cattle are bred in such quantities that all Europe ought to be supplied with beef from the herds that pasture on the llanos, while it is a tradition as old as the days of Raleigh that in the province of Guayana are rich gold mines. It was in this region 94
that Raleigh sought for the city of El Dorado, as the Spaniards had done before him. Milton even refers to the

> "—_Yet unspoiled
> Guayan, whoso great city Geryon's sons Call El Dorado.""

Guayana is not unspoiled, for the gold mines of the Yuruari, in the Caratel district, yield considerable amounts of the precious metal, both for alluvial and quartz mines. Guayana being separated from the other provinces of Venezuela by the Orinoco, is practically independent of the revolutions at Caracas, and for a South American State enjoys comparative immunity from the endless revolts which rack these uneasy lands. The appearance of the country is flat in the extreme. Near the mouth of the river the forest seems to rise almost out of the water, so little is it elevated above the level of the bed. Here there are scarcely any open spaces, dense forest being the rule, and llanos the exception. Birds are frequent in this primeval jungle, the commonest being a species of kingfisher, called chequakin by the natives, while the scarlet ibis is a frequent objeet by the water's edge ( p . 101). A few Guarano Indians have their homes in the unhealthy delta, and slender-looking houses their homes are. "A roof of thatch, supported by four or six upright poles, constitutes the dwelling-place of the redskins. Here they sling their hammocks, on which they lounge by day and sleep at night. They cultivate a little sugar-eane, and a few plantains, fish, or they sit in the canoes, and 'loaf' about, without any other settled occupation. About a dozen of them came down to the shore to see us go by. Their clothing was most seanty-nothing more than a few square inehes of ealico fastened by a string round the waist. A yard or two of calico, and a ball of string, would furnish the clothing of an entire family. Their personal appearance is not prepossessing ; the skin is of a reddish-brown colour, the cheek-bones projecting, the nose aquiline, and the hair black and straight." $\dagger$ Such at least is Dr. Le Neve Foster's opinion. There is nothing except these Indian hamlets and a few plantations to interrupt the serried mass of forest on each side of the river, and the labourers who turn out to see the steamer pass, or the few loats making their way up or down the current, are about the only objects conn cted with man to show that an attempt has ever been made to "spoil" Guayana. Highes p the river towns begin to appear-Barrancas, with a wooden cross in front ai, the watrr's cdge, and behind a few wooden houses and palm-trees, Guayama Vieja, La Tablas, and higher up Angostura, or Cindad Bolivar, the capital of the province. Still, the seenery is not striking; low hills bound the view, some showing grassy slopes, with a ferv trees, and others covered with forest; but the river itself is a magnificent stream, muddy, it is true, but a mile or two in width, and impressive from its magnitude, if not from the beauty of its banks. $\ddagger$ Ciudad Bolivar is not a place to haunt the memory, thongh for Guayana it is an important town. The streets are regularly laid out at right angles to each other, paved with rough stones, and with a brick footpath at either side. The stores are of stone or brick, all whitewashed, and rooled with red tiles. The streets are sleepy in

[^41]the extreme, no carts being seen in them, and all the transportation of goods being effected by means of men and donkeys. The streets along the river banks are, however, brisker. Here lanchus, or river boats, may be seen landing hides from the upper Apure, which are afterwards to be transhipped on vessels bound for Europe or North America. In addition to lides they load with deerskins, tonka beans, balsam of copaiba, and possibly the famons Angostura bitters, though we believe that most of this staple is now made in Trinilad, and a good deal much nearer Europe-to wit, in Hamburg. Bolivar is, in some works on Venezuela, stigmatised as the home of yellow fever. These malaria-haunted towns of the tropies have so much to answer for in the way of iniquity that a little more or less will not serionsly make or mar their reputation. However, the strict accuracy of the geographer compels us to admit that in this respect Ciudad Bolivar has been unjustly treated. There is yellow fever within its bounds, but not often. Alligators, however, make up for the absence of "yellow jaek," and there are tales of river-side people in this delightful place having been snapped up by the spectacled cayman while standing at the doors of their own houses. Whatever may be the evil reputation of Guayana, at present one of its carliest explorers had a very different opinion of it, for Sir Walter Raleigh thus writes:-" Moreover, the countrey is so healthfull, as one liundred persons and more which lay (without shift, most slugglishly, and were every day almost melted with heat in rowing and marching, and suddenly wet againe with great showers, and did eate of all sorts of corrupt fruits, and made meales of fresh fish without seasoning, of tortugas, of lagartos, and of all sorts, good and bad, without either order or messure, and besides lodged in the open ayre every night) we lost not any one, nor had one ill-disposed to my knowledge, nor found anie calentura, or either of those pestilent diseases which dwell in all hote regions, and so nere the equinoctiall line."; Maturin has an area, including Cumana and the territory of Mariño, of 17,494 miles, and at the last census had a population of over 54,000 . Cattle and salt are its staple products. Close by as Aragua, on the southern slopes of the Carepe Mountains, is the celebrated cave of Guacharo or Carepe. This cave is altogether 1,385 yards long, and from 70 to 80 feet in height. In the first part of it are found innumerable multitudes of the birds called Guacharos, $\dagger$ from the young of which in Humboldt's time the Indians made 160 bottles of fat oil yearly. The roof and sides are covered with stalactites. A shallow stream 1.5 to 20 feet wide runs through this part of the cave. The second part of the cave is minhabited but the third is full of stalactites, and is iuhabited by the curions animal called Lapa, which is exceedingly good to eat. Cumana ( 55,479 people) is remarkable for the many good harbours which it possesses, and its capital, a town of the same name, with 5,000 inhabitants, is one of the oldest of the mainland towns. It is also the focus of all the earthquake disturbances of this region, and has more than once been overthrown during the great commotions which so frequently shake the whole country. Coffee, cocoa, cotton, sugar, and

[^42]tubateo are its chief artieles of commerce, but it also exports horses, cattle, salt, and petrolemm, and a little cinchona bark. In the sixteenth century the pearl fishery was earried on to some extent in the calm water surromnding the island of Nueva lisparta, but it has now dwinded away to nothing, and its place has been taken by the turtle fishery. The sea so abounds with fish, that nets 200 yards long are drawn twice a day, and according to the information furnished by Mr. Lastwick, usuully bring up from ten to twelve hundred weight of fish, and sometimes so many that it is necessary to cut the meshes and let some escape. The State of Bareclona ( 13,81 . square miles, and 101,390 people) has much the same products as Camana, Guarico, Bolivar, Guzman Blanco, and the federal distriet of Caracas (around the eapital), which, taken together, have an area of $33,0 n(i)$ suare miles, and a population of 171,291 , chiefly engaged in cattle rearing, though also exporting coffec, chocolate, sugar, indigo, and twhacco. The district around Victoria, a pleasant town of 9,000 inhabitants, is anong the richest in the country. It is surromuded on all sides by caleareons hills, and by the most luxurious plantations, and riehly cultivatel gardens and fields.

The State of $\mathrm{A}_{\mathrm{p}}$ ure is inhabited by the Llaneros, who are said to make the best horsemen in America. It is 18,590 square miles in extent, and possesses about as many inhabitants. Nearly the whole population is devoted to eattle rearing, and hence the "plainsmen," passing the greater part of their life in the saddle, are only surpassel as horsemen by the ganchis, of the Pampas, further to the south. One of their countrymen, Ramon Paez, thus deseribes them:-"Cast upon a wild and apparently interminable plain, the domain of savage beast and poisonous reptiles, their lot is to pass all their life in a perpetual struggle, not only with the primitive possessess of the land, but with the elements themselves, often as fieree as they are grand." The Llaneros, probally owing to the fact that they are a mixed race, spring from a commingling of the Spaniard, Indian, and negro, possess a healthier and more vigorous constitution, and more energy than either the Europeans or Africans, or even the Indians, whom assuredly they exeel in activity and aptitude for labour. 'The climate of Apure is, however, he no means conducive to industry. It is hot, though healthy. From December to February the sky over it is clondless, but from April to August the rain falls in such torrents that during the greater part of that perioul the whole eomntry is little better than one vast lake. The provinee then becomes impassable to all exeept the harliest and most experienced of the natives. Numberless cattle are destroyed by the jaguars, the alligators, and by the yet more troublesome Caribe fish, or are drowned in the waters. Notwithstanding this, the herds abound to sucl an extent as to surpass all powers of description. Some iden of their number may, however, be formed from the following circumsta:ce. It has been found impossible for any eattle owner to brand more than ten thousand animals in a year. But there were, eleven years ago, at least ten proprietors who had more than that number born in their herds ammally. Consequently, they were allowed to purchase the privilege of elaiming all the unmarked anmals near their pastures. Now, if we consider how great must be the herd which supplies more than ten thonsand fresh animals every year, and that certifieates are issuel to ten proprietors of their baving such a herd, while many other claimants to the certificate exist, and that several thonsand proprietors who possess herds of various classes below that first rank, it will be

evident that the cattle must be reckoned by hundreds of thousands, if not by millions. Zamora is among the most promising of all the Venezuelan States, since it possesses, in addition to its lroad grazing lands, rich arable soil, and great commercial facilities, owing to the River Domingo, whieh communicates with the Apure and the Orinoco, flowing through it. It has also numerous waterways in the Conagua, Apure, and other rivers, navigable waters, up and down which float a considerable trade in coffee, cocon, hides, indigo, timber, rice, cotton, maize, sugar, potatoes, chuck-pens, tares, shoe-leather, drugs, Indian barley, brandy, horn, mules, horses, eattle, and a host of other agricultural products, with, of course, the usual amount of Luropean goods, which the people reecive in exehange for the products of their lands. Portugueza and Zamora comprise between them 23,845 square miles, and have respectively 79,934 and 50,449 people. Cucon, indigo, coffee, and cotton are the articles to which they are devoted. Cojedes and Carabobo, in conjunetion, have an area of 8,119 miles, and a poraulation of 85,678 and 117,005 respectively : they possess some of the riehest soil and most beautiful scenery in the Republic, while their elimate is reported to be "delightful." Yaracui and Barquisimeto comprise 0,352 square miles, and 143,818 and 71,689 people respectively, are chiefly mining, woodland, and pastural States, though in the valleys cocoa, cotton, and indigo grow, and on the hills some of the finest corn in the country. Faleon is a province of 10,253 square miles, and claims 09,020 people. Trujillo ( 4,325 square miles, and 108,672 people), Guzman Merida ( 67,849 people), Tachira ( 68,619 people, and, with the previous State, 10,848 square miles in area), Zulia, and the territory of Goajiro ( 28,034 square miles, and with populations of respectively 59,235 and 29,263 ), and the territory of Amazonas ( 13,583 square miles, and 23,018 people), are the remaining political divisions of the Republic of Venezuela. Zulia is the province bordering the Gran Lago de Maraeaibo. This lake, though it has an outlet to the sea, is fresh, but its well-timbered shores are unhealthy, and the soil generally sandy and poor. The entrance is impeded by a bar, which renders it difficult for vessels drawing more than nine feet of water to enter from the sea.

These divisions of the Republie have, however, been so often altered in extent, name, and so forth, that it is somewhat difficult to keep abreast of the tergiversations of the Venezuelan politieians or topographers. A State or two more or less, reconstrueted by the desire to do honour to the "patriot" of the hour, must, however, to those outside the circle of the politics of Little Venice, be a matter of the least possible importance. Among the most remarkable features of the country is the Lake of Tacarigua, not far from the town of Valencia. The lake was in Humboldt's day over thirty miles long, but it is now only twenty-three. To his list of islets must now be added seven new ones, so that in little more than half a century the water must have sunk sufficiently to lay bare seven new places. In 1810 Valencia was only three miles from the lake; it is now nearly eight. At one time, indeed, the lake seems to have covered the site on which the city is built, but the rapid evaporation ( 130 inches per annum), the cutting down of the wood, and other causes mentioned, have rapidly decreased the feeders of this fine sheet of water. It is dotted on its borders with good plantations and much fine land. The water of the lake is fed by fourteen small streams, but is brackish, and contains four different kinds of fish. It is calculated, from what is known regarding

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the diminution of the water in it since Inmbodit's visit, that in 100 years the lake will have dried up. This process will lenve at the end a great tract of very fertile country, while, supposing the streams which at present feed it sullicient for irrigation, the proluctiveness of the valley of the Aragian will be increased. The country would also inerense in healthiness, for the fevers now so rife on the lorders of the lake will disappear. But, on the other humd, should the streains dry $u_{p}$, when the moisture of tho air caused by the present great evaporation discontinues, then, notwithstanding the fuct of there being ninety feet of rich black soil here, the cultivation must inevitably cease to a great extent. Were the waters of the river Pao, diverted from it into the Portugueza during the seventeenth century, again brought back, the beautiful lake might be maintained; but the Venezuelans do not seem to have the public spirit or the energy necessary to perceive a feature of the country which has been tersely deseribed as "a glittering expanse of silver water, studded with fairy islets, rich masses of foliage of every hue, a eity in the distance that seemed built of white marble, and hills that gradually swelled into blue mountains." Caracas (p. 97) is in its build like most other Spanish American towns, and were "it not for earthguakes, epidemics, insect plagues, triemial revolutions, and bell ringing, there would be few more desirable localities for a residence." Valencia is not so pleasant a place-healthy enough, cheerfully situated, but very hot. Mr. Enstwiek deseribes it in no glowing terms:"Nature does the business of watering the streets gratis. I had a specimen of her performance in this line on my return from visiting the churches. The sun was shining brightly when I entered the Franeisean monastery, and I stopped there only a few minutes; but on my coming out the seene was ehangel. In a minute or two, with scareely any warning, clouds came swiftly over the hills: there was a sound of very subdued thunder, a sharl ${ }^{\text {P }}$ shower for about a quarter of an hour, and out eame the sun again. This process happens daily, sometimes twice a day, in this delightful climate, when the temperature never varies more than four degrees of Fihrenheit-from $78^{\prime \prime}$ to $8: 2^{\circ}$. In this respect Valencia resembles Singapore. Yet, the sun being vertieal, it is not safe to he exposed to its rays between $10 \mathrm{a} . \mathrm{m}$. and $+\mathrm{p} . \mathrm{m}$. One day a native of the country paid me a visit with his face literally tlayel. 'It's all from riding about in the sun,' said he; 'so you, who are a stranger, must not attempt it. A young American, who came to Valencia last year, thought to harden, and was continually in the sun; but he died mad, just after he had told us that he had got the better of the climate.'" But in these tropieal countries one town is very much the same as another town. They are all hot, all dirty, and all the home of the fourth plague of Egypt.

## Sosie Venezcelan Tratts.

The first of these I should characterise as an aptitude for getting into debt, borrowing and never paying. Not that this is any way peculiar to the Republic in question ; all the South Ameriean Governments are similarly guilty, or at least were, for the world has now got wiser than to lend them any money. The implecuniosity of Venezuela and its efforts to get money are ludieronsly pathetie. "Horrible situation!" (we are quoting an official address of a late President) "not only the army was in want of the neeessaries of life. Civil officials had no pay. The widows and orphans who had been pensioned were dying of hunger. The wives and

Children of the soldiers on serviee conld obtain mo menns of support. We culled in the Custom Honse at la Guaira for money, mad the maswer was-'There is none! We miphed
 measures. What recollections! What agony! What horror!" They then got relief' hy a
 mems of smpurt." "The public revenue," writes this gushing ofticinl, "will he, inste:al


of an advantare, a callamity, if it continue to the the aim of all who thist th grow rich at the expense of the country." But that is just what the Veneznelans, like mest sonth
 Which requires mo translation in these lands; for every one knows what is the meaning of the best estate being the government ill-administered. Nobody looks for an ollicial to be honest, and indeed to rob the country is mot comsidered dishonest. Mr. Justwick some yeass ag", went to Venezuela to relieve the Venezuelan "agony" for the want of money, and if pussille to get some interest for that which he and his fellow vietims had alrealy lent the imronniens republic. "How is it," he asked an intelligent mative, whose father hai
been an Englishman, and therefore still retained something of an intelligence not utterly warpel by prejudice and self-coneeit, "that this country is so wretchedly poor, and so eternally loorrowing money? You havn't a particle of shame. Your (ioverument Honse looks like an East Indian go-down. Your great men muke no disphay, and as for your soldiers, one would think that the last suceessful campaign had been against the fripiers, and that the victors were carrying off the plander on their loacks. It is evident that yon Vencanelans ure not extravagant, and it is plain that you have great resourees if you knew how to use them. Your soil is the richest in the world, and has never been trodden ly any invader sinee the Spaniards were driven out. Then what is the reason that you are ulways borrowing from other countries? How is it, too, that while the United States of North Ameriea have made such progress, the population in your republic is all but stationary, the seas and rivers without steamers, the country without roads, and commeree languishing?" In sulstance I bave already given the answer (pp. 70-76). The people want energy, and they want public spirit. The Spaniards kept them at peaee, and grave them a kind of prosperity. But they also kept them ignorant of the art of selfgovernment, and set them an example of the narrowest poliey, and the worst of all political coonomy. When they were onsted from the country four-fifths of the population could not read, for there were no schools, and even in the capital there was no printing-oflice until 1s10. But even had the Vencauclans had a better politieal training, it is doubtful whether they would have been any better financiers. The Creoles have many good qualities, but a love of physical labour is not one of these. They are sharp-witted enough, but if the country were to be dependent on their labour, it might go to ruin: the Indians and the mixed breeds do all this. Again, the taxes leviel by the Spaniards-the alcabala, or excise, the armada and corso, or coast taxes, the medias anatas, or deduetions from salaries, the monopolies of salt, eards, eane, liquor, and tobaceo, and mumerons other imports-were all so odious to the new nation that as soon as they declared themselves independent, they made a clean sweep of them, leaving only the eustoms to supply a publie revenue. Now, of all taves which a comntry with a coast line of 2,000 miles conld have imposed, this was, perhaps, the worst. Smuggling goes on wholesale. Of $200,000,000$ dollars worth of goods imported into the country during the first sixteen years of independence, $1: 2,500,000$ dollars worth were smuggled. These are official figures. In addition, such are the venality and corruption of the eustom-house offieers, up to 185: it was calculated that $101,000,000$ of dollars were stolen by these revenue collectors. At present the loss to the government by contribands and frauds of all kinus is believed to be not less than $6,000,000$ dollars per annum. But this is not basel on aecounts published in Venezuela. If other countries dil not pullish the amount of their exports to Venezuela no one would really know what is brought into the country. It is only by comparing the home fictions with the foreign statisties that be real extent to which the government is cheated is known. Take one example :-The eustom-house returns only show a eousumption, per head, of a quarter of an ounce of soap per week, which, even making a liberal allowance for the uncleanliness of the proletariat, is giving them too little of this taxed toilet requisite. Again, it is well known that the district of Caracas alone consumes a hundred barrels of flour a day, yet the custom-house makes out that the daily con-
sumption of all Venezuela is not sixty-nine barrels. Henee the treasury is chronically empty, and there are no remittances to the capital except from La Guayra and Puerto Cabello, where the Federal Government exercises some control. The other States coolly appropriate the customs revenue for their own purposes, considering that they are committing an act of great generosity, and not a little of softness also, when they send anything to the Federal Treasury in Caraeas. "Of course the only resource is to borrow in foreign markets." The Venczuelan Constitution-like most paper toys of that description-looks well enough in books, but works ${ }^{\circ}$ badly ${ }^{\circ}$ in ${ }^{\circ}$ practice. The individual States attend but little to the orders of the general government, and Caracas, as Humboldt long ago pointed out, is so situated as to be unable in so wild a country to exercise much control over the individual States of which it is the federal capital. Add to this the overweening conceit of the people. If still waters run deep, some one remarks that the patriotism of the Venezuelans must be very shallow, for it is very ncisy. They consider themselves-as Colonel Chollop did his countrymen-" the flower of the airth," and talk aceordingly. To the English the Venezuclans .were indebted for their freedom, and to English money for the doubtful lenefit of being saveid Arom an early bankruptcy, and as a matter of course no nation is looked upon with such jealousy as the English, albeit all foreigners are disliked, probably for one reason, among others, that they cherish Old World notions about the propriety of a nation paying its debts. Here is a case in point:--The Quebrada mines, once the private estate of Bolivar, is now the property, by purehase, of an English company. A railway has been built, and among means taken for the development of tho district, the new and flourishing part of Tueacas has becn established. Yet it is in vain that we look for any aeknowledgment of this in the Caracas newspapers. On the contrary, we learn that the entire enterprise was due to the President of the day-to his talent, liberality, and-save the mark-to his engineering skill and yublic spirit. The name of Englishman is never mentioned. Even when, at the inauguration of these works, President Blauco thought fit to speak in gęnerous terms of those whom Bolivar, after the decisive fight of Cerabobo in 1821, called "salvadores de mi patria"-saviours of my country-the press did not care to report his words. It is true that honest journalists have sometimes found that there were inconveniences in plain-speaking, and the Culabno:e of the country is, as Mr. Mercer remarks, "an institution whieh most are satisfied with hearing of, and with which they have no desire to make acquaintence. Again, because they have suceeeded in throwing off the Spanish yoke, it does not follow that they have achieved liberty, and they would do well to be less persistent in their mockery of that sacred word." Hence British capita! does nol affeet Venezuela. Its comnection with that country has been too often one of schemes begun and never fiuished, or more fortunate, of "eoncessions" granted, but not accepted, to the extent, at least, of moncy being sunk in them. The Venezuclans hate Trinidad, because it gives shelter to their maleọntents, and they hate Curaçoa, beemuse there Dutch enterprise comes out in only too strong relief to their histlessness. I am well awire that contrary opinions have been expressed, and, indeed, I have before me at the present moment some of these euiogia of the Venezuelans. It will, however, be generally found that the gentlemen lolding or affecting to hold these views are anneessionnaires of railway, mining, telegraph, or other grants, and are inspired by that gratitude which
ronically Puerto coolly mitting lhing to foreign 1-looks end but pointed control weening tism of ves-as ly. To ney for course ers are out the es, once ny. A ict, the ve look on that -save ; never ght fit rabobo id not $t$ there Mr. whicl owing would rapita! he:nes ed, to nidad, there well esent :ound of vhich

Rochefoueauld defined as a "sense of favours yet to receive." It might be curious to ascertain these gentlemen's opinions twenty years hence. The "ingratitude of republies" has grown into a proverb, but of all repul' 1 ics, those of South America are the most unmindful of the favours they have received. Possibly, also, they are markel among nationalities for possessing lut few citizens deserving very well of their native land. Still, Bolivar did great things for "Colombia," albeit in private life he was contemptible, and even not faultless, if we are to credit the testimony of his contemporaries in his public career.* Yet he was allowed to die in exile in want of the necessaries of life. Possibly his countrymen in whose behalf "he ploughed and sowed the sea," imagined that by giving him lofty titles, such as "Liberator," they had fully recompensed him for his toils and his losses. In the same way they decreed General Falcon the title of "Gran Mariscal," and Paez the empty glory of being called the "Illustrizus Citizen," yet Paez, like Bolivar, died in that exile in which he passed the greater portion of his life. The people are lazy beyond anything which we in the northern climates can imagine. The only toil they are fond of is fighting. Hence the planters try as far as possible to get women as labourers, for they work nearly as well, and cannot be taken for soldiers. It is recruiting that ruius the agriculture of the country, and hence the landowners are very apt, when they hear of a revolution having broken out, to pack off to the mountains all their able-bodied labourers, who return when the dogs of war have satisfied their appetite for blood and liberty. The army of Venezuela consists nominally of 5,000 men, but every citizen from the eighteenth to the fortyfifth year inclusive must serve in the national militia, by which later civil wars have been almost entirely carricd on. Miserable-looking militaires they seem to be, from the account of an eyc-witness. Here is a picture-not flattering:-"I have seen troops of all nations, rivilised and uncivilised, from China to Peru, but never any like these. Some of the officers, indeed, were tall and well made; but the men were the strangest figures-lean old scarecrows and starveling boys not four feet high, the greater number half naked, with huge strips of raw beef twisted round their hats, or langing on their belts. Their skins seemed to have been baked black with exposure to the sun, and their arms and accoutremsnts were of the most wretched deseription. Yet they were not contemptiblefar fror it-rather weird, repulsive-a sight to make one shudder. My first thought on seeing them was 'what culld want, miasma, exposure, or fatigue do to harm these animated skeletons? Could anything make them blacker, grimmer, more fleshless, more miserable?' But in this very wretchedness consists their strength; for European soldiers could not exist when these men would thrive." For long Venezuela was divided into demoerats and aristocrats, or oligarchs-"Godos" (Golhs), and "Epilepticos" (Eipileplics) -as the slang phrase was. The colours of the one party was yellow, of the other red, and such was the fury which civil strife excited in these half-civilised militiamen, that a child or a woman wearing the obnoxious colour would have rum as excellent a chance of heing slaughtered as the wearer of an orange waistcoat does on St. Patrick's Day in Cork. The Venczuelans are in private life a very hospitable and rather kindly prople. But no

[^43]sooner do they get into uniforms than it is dangerous for a humble eivilian to approach them. In a linen jaeket, Don José is most harmless, even when intoxieated; in a searlet eoat, El Capitan is a truculent mortal, fieree to behold. This makes Venezuela in war time rather an uneomfortable place to live in, as the chances are that your tailor will be a colonel; indeed, a traveller deseribes being measured for a pair of tronsers by one of these military sartorial magnates, clad in full uniform, spurs, sword, and all. He was a most dignified personage, and his dignity was doultless charged in the bill. And here, it may be remarked, that Venezuela is an uneonseionably dear place, eustom-louse extortions making imported goods necessarily expensive, while labour amongst so lazy a people is also uaturally an expensive commodity. Yet immigration is for langlishmen and Americans not desirable. An energetie high-spirited race could not long tolerate the linises aller disposition of the government, the instability of the law, and the utter listlessness of the people. The country has now enjoyed a comparatively long interval of peace. But how long this will last it is impossible to say. Roads which do not exist on a great portion of the country; and railways which must for a long time to come be mere dreams, may alter the state of matters. But meantime wise men wil leave Venezuela to the Venezuelans, notwithstanding its riches, which are varied and great. What these are we have already indicated, and some of the more remarkable, which are common to the neighbouring countries, we may have oceasion to reler to in the next chapter.*

## CIIAPrier ViII.

## Gchava: Bretin, Deth, and Fbeach.

" A swampy forest, as big as lramee and Spain put together, with a huge drain ruming through the middle of it, full of snakes, jaguars, and alligators, with plantations here and there, and a sprinilling of savages who think ant paste a luxury," was the urflattering. description of the country we are now about to describe, given, we believe, ly a Hibernian offieer fonder of epigrammatic conciseness than of strict accuracy. The borders of Guianaunder which we do not inelude, of course, the Venezuelan State of the same name-is an ill-defined region stretching along the coast, south of the Oriuoco, and back some distance into the region which naturally belongs to Venezuela, though the greater portion of the rolonies of Britain, Holland, and France, which go under that name, are formed out of a huge slice of North-eastern Brazil-comprising, in all, nearly four and a-half degrees of latitude-the coast-line being 650 miles long, and the extent inland from 240 to $\quad \mathrm{ab} 0$ miles. The const is in general low, and covered by a dense busb of mangrove and curida (Acicenniu uitidu), behind which rise up lofty palms, with their feathery heads, and here and there the tall chimneys of the sugar plantations. Inland, a low, unbroken level, covered with a riel tropieal vegetation, extends from ten to forty miles. It is whelly

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alluvial, and rests at depths varying from 50 to $: 200$ feet, on granitic rocks; the strata, consisting of clay, sand, and vegetable matter, are impregnated with oxide of iron and salt, except along the banks of the rivers. These carry out to sen large quantities of
sediment, which, miugling with that borne along irom the mouth of the Amazon by the equatorial current, and colouring the sea 100 miles out, have no doubt produced, in long ages, the vast alluvial deposits which form the broad maritime belt and rich settled districts of the colonics (Bryce). These settlements are usually along the banks of the rivers, and a few feet below their level, so that they have to be protected from overflow by means of levels. Behind the alluvial districts extends a wall of sandstone, making, no doubt, the old shore line, when the coast lands were still under water. Still further inland is another ridge of hills, probably marking a still older rame , ea cliffs. From this range stretches loack a table-land which gradually ascends until it reacheza height of 2,500 fect. The rivers in their descent from this elevation form a series of cataracts which usually stop all navigation, at a distance of from 50 to 100 miles from the sea. The cataracts of the Orinoco belong to this serics. The highest of the Guianan cataracts is the Kaietur Fall, of the River Potaro, a tributary of the Essequibo, where a great body of water tumbles over a cliff 822 feet high, 741 feet being perpendicular descent* (p. 117). From this plateau the mountains rise in irregular groups, and are lost in the mountain system already described, or in the great llanos of the Orinoco, Rio Negro and Amazon. The climate is foggy, though a European soon gets acclimatised to it. The land breczes are the most dangerous, because they bring miasma from the low-lying lands in the interior. For the same reason the sea breezes are healthy, as they sweep off the fever-breeding vapours that would otherwise collect in the hollows of this flat region. Cayenne, or the French section of the country, is the worst, but no part of a country which has a rainfall of from l 12 S to 103 inches, and a temperature varying from $100^{\circ}$ on the southern coast tc $60^{\circ}$ on the hill districts in the interior, cai be free from intermittent and bilious fevers and ague. Yellow fever is, however, absent. Earthquakes are not uncommon, but comparatively mild, though the hurricanes which desolate some of the West Indian islands are unknown. There are rarely any springs, the inhabitants depending on stored-up rain-water. The various rivers communicating often by navigable channels, which ramify all over the country; make travel, whieh would otherwise be difficult, much easier than in many of the more nountainous regions to the north, or even to the south, where, owing to the impenetrability of the forsts, people living only a few miles from each other have to spend a day in going up one river and down another before they can pay visits. The forest region proper only commences in Guiana about forty miles from the coast, and clothes the mountains to their summits. They contain many valuable trees, such as the mora (Mora everelsa), the king of the forest, which reaches a height of 120 fect, the greenheart, or siperi (the timber of which makes fine planking, while the seeds are febrifugal), the bully tree, the eumara, or tonka bean, the carana, or cedar-wood, the hueouya, or iron-wood, the letter-wood (a costly timber valued for veneering), the simiri, or locust tree, the yaruri, or paddle-wood, and many other species. Sir Robert Schomburgk, one of its earliest and ablest explorers, so lucidly describes this region that I may be allowed to conclude this general sketch of Guiana by an extract from one of his reports:-" The coast, washed by the waves of the Atlantic Ocean, is covered with mangrove and curida bushes, and presents a verdure of perpetual

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freshness, forming, as it were, a seam or fringe to the rich carpet behind. These are enlivened by numerons flocks of the scarlet ibis, the white egrette, and the splendid flamingo, which, disturbed at the approach of an intruder, soar into the air, or perch on the summit of the trees. Where cultivation has not stamped its seal on the landscape, the marshy plain changes to savanna, resembling the meadows of Europe, watered by rivers and limpid streams, interspersed by groups of palms or tufts of trees. On aseending the great rivers, which have been happily called the 'veins of the country,' we find them covered with verdant isles; and as we approach the primitive forests the landscape assumes the features peculiar to the tropics. It appears as if the power and strength of productive nature, in recoiling from the Poles, had collected itself near the equator, and spread its gifts with open hand, to render its aspect more imposing and majestic, and to manifest the fecundity of the soil. Gigantic trees raise their lofty crowns to a height unknown in the European forests, and display the greatest contrast in the forms and appearance of their foliage. Lianas cling to the trunks, interlace their wide-spreading branches, and having reached their summit, their aërial roots descend again towards the ground, and appear like the cordage of a ship. Clusters of palm-trees, of all the vegetable forms the most grand and beantiful, rise majestically above the surrounding vegetation, waving their pinion-like leaves in the soft breeze. Nature, as if not satisfied with the soil allotted to her, decorates with profuse vegetation the trunks and limbs of trees, the stones and rocks. Even the surface of the water is covered with a carpet of plants, interspersed by magnificent flowers. What could better give an idea of the luxuriance and richness of the vegetation in Guiana than the splendid Iictoria regia, the most beautiful speeimen of the flora of the Western hemisphere ( p .112 ) ?* The calm of the atmosphere, where frequently no breath of wind agitates the foliage, no cloud veils the azure vault of heaven, contrasts strangely with the hum of animated nature, produced by insects of every kind. The humming-bird, with its metallic lustre, passes rapidly from blossom to blossom, sipping the nectar of fragrant flowers, or sporting with the dewdrop which glitters on its leaf. It is usual to deny to the birds of the American forest all melody. Many are the feathored songsters which enliven the forest. Although they may not vie with our nightingale in melodiousness of tone, they are not devoid of it. Night approaches, and displays the firmament with all the splendour of the Southern constellations; the musical notes of birds now give phace to the chirping voices of crickets, the sonnd of the tree-frog, lizards, and reptiles. Thousands of phosphorescent insects flutter among the foliage, emitting a light which, if it does not illuminate, assists to increase the characteristic features of a tropical night." $\dagger$

## Britisif Guiana.

This colony is sometimes called Demerara, although in reality it includes the settlements of Demerara, Essequibo, and Berbice. It extends from east to west about 200 miles, and

[^46]though its boundaries between Venezuela and Brazil respectively are madetermincel, yet it has been computed to contain an area of 76,000 square miles.* The territory was first partially settled by the Dutch West India Company in 1580, and from time to time has been held by Holland, Fiance, and England. In 1802 it was restored to the Dutch, but in the following year retaken by Great Britain, to whom it was finally ceded in 1814. Under the Dutch, Demerara and Essequibo constituted one government, and Berbice another.

negresser of ditch guiana.
This arrangement continued in force under the British administration down to the year 1831, when the prosent mode of administration came in force. The Dutch law is, however, still in force in civil cases, but the criminal law is administered withont the intervention of a grand jury, though otherwise in the same manner as in Britain. The government is also essentially that of the old Hollandish days, and it works so well that the Demerarans are quite content to live under the system which the Batavians devised. The only two towns of any importance are Georgetown and New Amsterdam, and the cultivated districts are confined to the coast and a short distance from the river banks. At one time coffee and

[^47]cotton were extensively cultivated, but at present the colonists coneentrate themselves on the production of sugar, rum, molasses, and rice, and on the exportation of timber. ln 187. there were exported $£ 1,668,378$ worth of sugar, $£ 340,307$ worth of rum, $£ 79,281$ worth of molasses, $£ 56,97 \%$ worth of rice, and $\mathfrak{t 4 5 , 1 7 0 \text { worth of timber. The country }}$ may be said to be prosperous. In 1865 the revenue was $£ 379,392$, and the expenditure $£ 300,894$. Then for a few years the ineome fell off, while the expenses increased. This unsatisfactory state of matters ceased in 1869. In the latter year the revente was $£ 311,377$,


A Yillage in french geiana
and the expenditure $£ 293,030$. From that time the revenue has steadily increased, though at the same time the expenditure has swelled out to proportions even greater. For instance, in 1874 the first stood at $£ 475,885$, and the latter at $£ 485,893$; * in 1875 it was $£ 352,137$, and $£ 355,970$. In the same year the public debt was $£ 403,537$. In 1875 the imports were valued at $£ 1,837,158$, and the exports at $£ 2,337,122$, most of which were to the United Kingdom. In 1571, the total population was 193,491, of whom 113,570 were natives of the colony, 13,385 of the West Indian Islands, 7,925 of Madeira and the Azores, and 9,635. cf "other places." In 1875 the population, exclusive of aborigines, was estimated at 212,000 . In addition, there were "under indentures" the following "coolies" and labourers:-33,360 natives of India, 3,875 Chinese, and 362 Africans; 37,597 in all. In 1871, the aboriginal

* Exclusive of the sums raised for and expended by the planters on immigration of coolics.

Indians were estimated at 7,000 , though the best authorities carry the number as high as 20,000 or 21,000 , but the number of the tribes within the British territories vary, and are at all times very uncertain.* The coolie system has, of course, been a very contested one. One set of philanthropists, who love the negro better than the planter, deelare that the Asiatic is a vicious individual, a corrupter of good morals, and an cater of the Ethiopian's bread. Another set quite as aerimoniously points out that the coolie is treated despitefully hy the planters, who have aceordingly had to be Looked after by Royal Commissions, and generally taught their duty. We daresay the men who have been so long accustomed to consider a white face as a patent of nobility do not go out of their way to coddle the indentured Asiatics. But on the whole they are tolerably well off, and quite as well as ever they were in their own country. They are not moral, certainly, and in no point of view an example to any virtuous family. But as they were not brought from the East to be ensamples to the planters or their ex-serfs, their morals are not a subject about which the Demeraraus partieularly distress themselves. Moreover, as there are within the bounds of the colony clergymen of almost every Christian sect-in addition to Mahommedans and Buddhists-the planters devote themselves to sugar and rum with a light heart. Whether the colony deserves the culogium of Mr. Anthony Trollope as being "the aetual Utopia of the Caribbean Sea," it would perhaps be rash to say. Utopias are rare nowadays in these regions. Still, in energy, wealth, and self-reliance, British Guiana presents a marked contrast to the absence of all these colonial necessaria vito in Jamaica.

## Dutch Gutana.

Surinam-as this colony is sometimes called-is immediately south of the British colony, from which it is separated by the Corentyn river. It has an area of about 60,000 square miles, and a population of over 70,000 , including 17,000 "boselnegers," or bush negroes, descendants of the Caribs and runaway slaves. In 1875, the exact civilised population was 51,329 . The deaths exceeded the births in that year, of whom only 5,000 are Europeans, and about the same number Chinese. Its products and general appearance are much the same as those of British Guiana. The country is not, however, so well developed, and in the hilly regions of the interior and south the country is held by the bush negroes, or runaway slaves, and is ali $\urcorner$ gether uncultivated. In 1576 there were 300 plantations, while the expenditure was $\mathfrak{£ 9}, 047$, or nearly $\mathfrak{f z t , 0 0 0}$ short of the revenue. This deficit had to be met by the mother country. Slavery prevailed up to 1803 , when the Government emancipated the slaves at a cost of $£ 25$ per head, which was paid to their "owners;" but for ten years afterwards the freedmen were put under Government surveillance (p. 120). The Dutchman carries his "institutions" with him everywhere. Hence British Guiana has canals, dykes, sluices, irrigation, and all other good things Batavian, which she inherited from the Dutchmen who laid the foundations of her prosperity. But when the voyager first approaches the Dutch Guianan coast he is rather astonished at the absence of any signs of cultivation, or even of human habitation. From Berbice to the Pomeroon-or near to it-the eye meets a succession of tall chimneys marking the coast-line and the spots where industry has

[^48]converted the haunts of alligators, snakes, and mosquitoes into a thriving colony. Along the Surinam shore nothing like this is seen. The explanation is, however, easy. A long range of swamps, difficult to drain, shuts off the coast of British Guiana from the high lands of the interior. Hence cultivation is chiefly limited to the former region, and the plantations in it are placed side by side on the long strip between the ocean in front and the morass behind. In Dutch Guiana cireumstances are different. There, the swamp is on the const. Aecordingly, most of the plantations are either on the river banks, or back from the shore, where the voyager cannot see them. Paramaribo, the capital of the colony, on the Surinam River (Plate XXIV.), is a thoroughly Duteh town of 23,000 inhabitants, clean, comfortable, tree-embosomed, and even handsome. There is about it, according to Mr. Palgrave's account, a sleepy lotus-eating air, "very calm and still, yet very comfortable and desirable withal." The traveller who lands here feels as did those who-
> " In the afternoon . . . . eame unto a land In which it seemed always afternoon."

The atmosphere is like that of a hothouse and of a vapour bath combined. The air you breathe up these Guianan rivers is the air of a country only $5 \frac{1}{2}$ degrees north of the equator-which has blown over the great moist plains, brimming river marshes, and dense forests that constitute nine-tenths of the Guiamas and Brazil. Fifteen milas of wood and swamp cut off from the sea-breeze what there is of it in the tropies. Hence in Paramaribo the air is that not of wind-swept Barbadoes and dry Antigua, but that of the "moistest among all equatorial eontinents." Yet the place is said to be not muhealthy, and as the wealth that pours out of it shows, all energy is not washed out of the people in the steaming perspiration which pours ont of their lank bodies. Surinam is really Holland under another sky, just as Paramaribo is Amsterdam, or the Hague by other waters. "This it is," writes Mr. Palgrave, "that gives Paramaribo its twofold character at once laropean and tropical, Dutch and Creole-a blending of opposites, a dual uniformity, an aspect that when first beheld leaves on the mind an impression bordering on unreality, as if place and people were imaged in a hot, unpicturesque dream. Yet Paramaribo is no drean, nor its inhalitants dream-shapes: very much the contrary. In fact, no capital town throughont the West Indies, no offspring of European strain, French, English, Danish, or even Spanish, so generously or truthfully represents the colony to which it belongs as Duteh Paramaribo. Contrary examples are easily adduced. Thus, for instance, Jamaiea is pre-eminently the land of English country gentlemen, of magistrates, landlords, farmers, and in tone, ways, and life, an English country district; while Demerāra is in no small measure an English, or, rather, I should say, a Scottish manufacturing district; Barbadoes an English parish magnified, not ar island. But weither Jamaica, nor Demerara, nor Barbadoes, possesses a correet epitome of itself in Kingston, Georgetown, or even Bridgetown : each of these three scaports has a character of its own, distinct from, and in some respects opposed to, the colony at large. This is due to many causes, and most of all to the mixed multitudes of trades, the camp-followers of enterprise, who, under whatever banner they congregate, aeknowledge in heart and life nc flag but that of individual self-interest. These are they who muster strongest in the
generality of colonial towns, especially seaports, and tinge, if they do not absolutely colour, the phaces of their resort. And thus from the merest port of call ulong thess shores to Georgetown, where it is deeidedly at its maximum a something of a restless make-shift egotistic 'Cheap Jack' admixture, obseures, or at least jars with, the publicspirited nationality, unsettles the population, debases the buildings, ungroups the unity, und deforms the beanty of place and site. With Paramaribo it is otherwise."

The colony itself is a Crown colony-that is to say, the Governor gets his appointment from the King, and holds himself responsible to the Colonial Office at the Hague alone. There is a House of Assembly, of which he is President, composed of four members nominated by himself, and nine elected by the people, who pay taxes to the amount of forty gruilders per annum. Its powers are, however, merely advisory, or deliberative, and really exereise little check upon the Governor. Still, the country is justly ruled, and not over taxed. In 15:3, there were aetually under cultivation 27,817 aeres, of which over one-half was assigned to sugar, one-half aguin of the remaining land to coeon, and the resilual quarter divided among eoffee, eotton, bamanas, and the mixed gardens of provision grounds. Population is wanted for the colonies. Coolies are imported, but they do not altogether meet the waut, while the negro and the half-wild race of the bush negroes are not yet thoroughly available for cultivating the land. The land is rich-beyond the power of its fertility being exaggeratel-but it is impossible for white men to cultivate it. Various attempts of the kind have been made, but all of them have been failures. There are no mines as yet known among the mountain ranges in the south of the Guiann territory, and long may they remain undiscovered should they exist. It is now nearly three eenturies sinee Bacon pronounced the sentence, which subsequent experience has only ratified, that ". o hope of mines is very uncertain, and useth to make the planters lazie in other things." Mining would soon ruin Surinam, and even the gold diggings in Venezuela have not aeted faromably on the European colonies in their vicinity.

## Fuencu Grona.

Cayenne, or French Guiana, lies betwe.n the rivers Marowen and Oy apock, which separates it from the Dutch colony on the north, and Brazil on the soutb. Its area is 25,000 square miles, though its boundaries are not well defined, owing to the Dutch and Brazilian Governments claiming portions of it. In $15 \% 1$, its population was $16,41 \mathrm{t}$, the division aecording to sexes being 7,839 males, and 5,575 females. This is not more than hall of what the population was in 1868 . There were in the same yeur 76 marriages, tho births, and 1,936 deaths.* In addition to the mainland there are several islands off the coast, the chief of which is Cayemne, which is the capital and almost sole port. Its physieal geography presents no marked features to distinguish it from the divisions of Guiana already deseribed, nor are the products different, viz., ornamental woods, rice, maize, eoffee, coeon, sugar, nutmeg, eloves, and pepper. The colony has been oceupied by the French sinee 1633, though it is only sinee 1854 that Cayenne has been made the chief penal settlement of the country. Any one condemnel to eight years'

[^49]expatriation must reside for the rest of his life in the colony. As a matter of fact he generally eseapes; but he is not expected to do so. However, such is the nature of the climate, nggravated by the conditions of life among the convicts, that the mortality is very great, though, as the Government docs not include the deaths in Cayenue among the general tables of mortality, there are no data to go upon.

## CHAPTER IX.

## The Empire of Buazil: Tife Amazoss.

In the year 1400, Vient Yanez Pincon, one of the companions of Columbus, sailing southward of the lands which were then known to the Spaniards, when near St. Augustine's Cape sighted what is now known as the Empire of Brazil. He went as far south as the Amazon river, but made no settlement, contenting himself with taking possession of the country in the name of his most Catholic Majesty. The possession was, however, shortlived, for next year Pedro Alvarez Cabral, admiral of a fleet sent by the King of Portugal to follow up the discoveries of Vasco de Gama in the East Indies, again took possession of the country in the name of his sovereign, and the Portuguese retained it as one of their colonies for more than three centuries, with some more substantial results than the formal flag-hoisting of El Capitan Pinçon. This was on the 2Sth April, 1500. But like his predecessor, Cabral founded no settlement, and after aecquainting the court with his discovery proceeded on his way to India. The honour of colonising Brazil must be given to the celebrated Amerigo Vespucei, a man much maligued, on aecount of the tradition that in some manner or another he plotted to get his name applied to the new continent, and thus deprived Columbus of the just honour to which he was entitled. Be that as it may, Vespucei, who had entered the service of the King of Portugal, remained in Brazil-or as it was at first called Vera Cruz and Santa Cruz-four months, and finally, after building a fort and leaving twelve men to garrison it, set sail for Lisbon with two ship loads of Brazil wood, monkeys, and parrots. Its history may hereafter be briefly summed up. Coloniss were established under the auspices of the Crown, in 1531, and in 1549 a colonial goverument was formed. After the annexation of Portugal to Spain, in 15S0, Brazil suffered much from the enemies of that country, the Dutch and French nearly eapturing the province. The restoration of the house of Bragança to the throne of Portugal resulted in the erection of Brazil into a principality, and the title Prince of Brazil was conferred in 1040 on the heir apparent to the throne. In 1807, when Napoleon declared war against Portugul, the Prince Regent, afterwards João VI., took refuge with his family in Brazil. Restrictions were then removed from her commerce, and in 1815, on the fall of Napoleon, Brazil was raised to the rank of a kingdom. In 1821, the King, to avert threatened revolution, promulgated a new constitution, and soon after returned to Portugal, leaving his son, Prince Pedro, regent of Brazil. This was the first instance of a colony being the seat of Government of its mother country, and it is likely to be
the list. For, suspecting that when the danger was pust, Dom Juiw intended to abrogate the constitution which he had given to Brazil, and to reeede from the honour which he had done it in bracketing with Portugul and Algarves, as being his " united kingdom," a revolution broko out in April, 1521. Either through fear, policy, or ambition, the Regent Dom Pedro sided with the Brazilians, and was deelared "Perpetual Defender" of the country. He furthermore announced its independence, and though the Portugueso made a feeble attempt to regain possession, the Brazilians rapidly carried all before them, and before tho end of $18: 3$ the authority of Dom Pedro, who had been prochimed Emperor, was reeognised throughout the wholo country, which, at that time, also comprised part of the present Republic of Uruguay. But the troubles of the new empire were not $y$ at an end. Republican movements began to gain ground. The ex-colonists feared
itism on the one hand, and anareliy on tho other. Finally the Emperor sigued the anviral constitution which the Assembly had prepared ; the King of Portugal was formally proclaimed Emperor of Brazil, only immediately to abdieate in favour of his son, the actual monareh of the Brazils, who aecordingly was crowned, and the country acknowledged as an independent sovereignty. The Government is an hereditary and constitutional monarchy, with a legislative body, consisting of a Senate of 58 members, appointed for life, and a House of Deputies, containing 122 members, elected for four years. The Deputies aro chosen by provincial electors, who are themselves chosen by tho people. The Senators are chosen also by the provincial electors in triple lists, from which three candidates the Emperor selects one, who holds offico for life.

In 1820, Dom Pedro I. becamo, by the death of his father, King of Portugal, but resigned the Portuguese crown to his daughter, Donna Maria. In 1831, after reverses, during which it lost Uruguay, and the country was on the eve of civil war, he abdicated the throne of Brazil in favour of his son, the present Emperor, Pedro II., then five years of age. The empire was governed by a regency till 1810, when the present Emperor was declared to have attained his majority. The history of his reign is written in the rapid development of tho resourecs of the empire, the ercetion of public works, the growth of commerce, the abolition of the traffic in slaves, and the provisions made for their gradual emancipation, the encouragement given to immigrants, and the establisiment of a complete system of education. Since the transition period of 1821-25, when the country was hovering on the brink of that restless political doctrinarianism and anarehy which has overtaken all the other South American countries, Brazil has enjoyed the blessings of a stable government, internal peace, and on the whole a greater degree of prosperity than we are accustomed to associate with the Latin nationalities of the New World. In 1865, in concert with the Argentino Republic and Uruguay, it declared war against Paraguay, a disastrous conflict which ended, in 1870 , in the utter prostration of that unhappy little republic, and the appropriation of a considerable portion of its territory by the Argentines. The immediate cause of the unfortunate war was the seizure, by the Dictator Lopez, of a Brazilian vessel in the Paraguay River, followed by an armed invasion of Brazil and the Argentine Republic. It involved on Brazil immense sacrifices of men, and an expenditure of upwards of $£ 50,000,000$ sterling.

## Pitysical Geography.*

Impeisio do Brazil-literally the land of the "live coal"-occupies three-sevenths of the South American coutinent, and euvers an extent of contiguous territory $3,257,96 \mathrm{l}$ square miles, greater than that directly under any covernment except Russia and the Cuited States, though, of eofurse indirectly, England govens an infinitely greater portion of the world if India be taken into account. The boundr.ry lines of the empire touct the lorders of all the South American republics except Chili. The greatist breadth of territory is 2,170


MALICE OF THE EMPEROK OF HRAZIL AT PETROPOLIS, NEAH RIO DE JANEIMO.
miles, and the greatest length e, 000 miles, the coast-line ineing 4,750 miles, whule the interior is extremely varied in aspect and formation. Brazil is, in general, a mountainous country, three

* In drawing up this account ${ }_{n}$ I raust confess my obligations, in addition to the memoirs and books whiel will be acknowledged in their proper plaees, to the authentie information drawn up by the Brazilian Commissioners for the Philadelphia Exhibitinn, to some exeellent articles in the Philadelphia Ledgar and Transeript, July 14th, 1870; Kidder and Flewhr: "Brazil and the Brazilians" (1857); Bates: "Naturalist on the Amazons" (1863); Wallace: "Amazon and Rio Negro" (1853); Keller: "Tho Amazons and the Madeira;" Burton: "The Ilighlands of Brazil" (1869); Agassiz: "Journey in Brazil;" Hartt: "Seientifie Results of a Journey in Brazil" (1870) ; Liais: "Climat, geologic, faune, et geographic botanique du Brazil" (1877); Orton : "Andes and Amazons" (1870); Pareira: "Situation social, politique, et ceonomique de l'empire du Bresil" (1865); 'onstatt; " Brazilien, Land und Jeute" (1877); Saint-Adolphe: "Diecionario Geografieo do Brazil" (1870); SelysL.ongchamps: "Notes d"un Voyage au Bresil" (1875); Scully: "Brazil, its Provinces, and Chicf Cities, \&c." (1868);


SCENE ON A TRIBUTARY OF THE RIVER AMAZON, BRAZIL.
great mountain ranges ( $\mathrm{p} .1 \geqslant 5$ ), and their spurs occupying over one-third of its surface ; but it is also remarkable for its vast plains, extensive valleys, and large rivers. The highest mountain (Pico do Itatiaiossu) has been reported to have an elevation of from 0,250 to 10,300 feet above sea level, and there are several above 5,000 feet in height. There are no known volcanoes in the empire, althongh parts of the soil are of volcanic formation. The


territory is well watered, the four great fluvial basins being those of the Amazon, the Tocautins, the Parana, and the São Francisco. The Amazon and its tributaries drain nearly $2,500,000$ square miles, or more than a third part of South America, including about

Waplacus: " Handbuch der Geographio und Statistik von Brasilion" (1871); "Mulhall: "Handbook of Brazil" (187i); Wickham: "Rough Notes of a Journey through the Wilderness" (1877); Brown and Lidstone: "Fiftecn Thousand Miles on tho River Amazon and its Tributaries" (1872); Bigg-Wither: "Pioneering in South Brazil" (1877) ; tho works of IIerndon, Edwards, Markham and others; the great "Flora Braziliana," and numerous articies in the Geographical Magazine, Proccedings, and Journal of the Reyal Gcographical Society, Parliamentary Papers, official reports, \&c.
one-fourth the area of Brazil, and has a course through the empire of nearly 2,300 miles. It is one of the wonderful rivers of the glohe. It empties itself into the ocean with such velocity that navigators, after losing sight of iand, may yet drink of its waters, its volume overlying-so it is said-the surface of the ocean for fifty leagues from shore. Beyond the frontier of Brazil the Amazon continues to be navigable by steamers for upwards of 1,188 miles, in the territory of Peru. The river and its tributaries are navigable, by steamers, through an aggregate length of more than 25,000 miles, and by snaller craft for double that distance. The river is altogether 1,000 miles in length, is more than 150 miles wide at its months, and far in the interior is so broad that its navigation is often dangerous on account of the tempests which overtake vessels before they can reach the shore. The Tocantins has a course of about 1,500 miles, and the Araguaya, its principal affluent, extends about the same distance. The Parana, in the southern, and the San Franciseo, in the central part of Brazil, are also large rivers, with numerous affluents. Steam navigation, subsidised by Government, has been established on many of the rivers, and the Government has been engaged for several years in surveys and engineering works, designed to improve navigation, or to carry passengers and freight around falls and cataraets, that obstruct navigation. Without these works, however, Brazil, with its forty-two harbours and numerous navigable streams, is weil iitted for carrying on foreign commerce and developing its interior resources. Most of the rivers are sulject to periodical floods, but the flooding of the Amazon does not interfere with navigation, as its affluents do not swell simultaneously. This river-called also the Maraĩon, Orellana, or Solimoens-is the largest in the world, and though it is doubtful whether it will ever play in the world's history so important a part as the Nile or the Mississippi, or even for long to come as the La Plata, yet it is peculiarly fitted for mavigation. The winds for six months in the year usually oppose the current, so that a vessel can either float down the river by taking advantage of the latter, or ascend up by aid of the sails. Steam has, however, minimised the importance of this physical feature of the great river, tnough to the Indians and the smaller craft which ply along it this circumstance is still held in useful remembrance. While the tide is felt 400 miles from its mouth, the foree of the current can be perceived 200 miles out to sea. Near the mouth is experiencel the effects of the great bore, or proroca, which La Condamine thus graphically describes:"During three days before the new and full moons, the period of the highest tide, the sea, instead of occupying six hours to reach its floods, swells to its highest limits in one or two minutes. Presently you see a liquid promontory twelve or fifteen feet high, followed by another and another, and sometimes ly a fourth. These watery mountains spread across the whole channel, and advance with a prodigious rapidity, rending and erushing everything in their way. Immense trees are sometimes uprooted by it, and sometimes whole tracts of land are swept away." The region through which the river flows is for the most part covered with the densest forests, impenetrable unless by the aid of the axe, to man, but abounding with jaguars, panthers, bears, and an immense variety of other wild animals. The Indian tribes of the empire also find a home here in comparative peace, and though they have still a great many of their pagan rites, the Jesuits-Spanish and Portuguese-have affected them so far as to coat their barbarism
in some cases over with a varnish of Christianity. The river abounds in lish and turtles, while the alligators, which are also numerous, may be often seen floating on the surface like great logs of wood, or lying asleep on the muddy shores or saud-spits, which here and there relieve the terrible monotony of ever umbrageous growth. In the valley of the Amazon, however, are also found great grassy llanos, and also many seleas, or marshes, which the river periodically overflows, so that between the Negro and Madeira at the time of tho anmual rise, the river covers a great part of the aujacent comutry, and has really no determinate limits. The name Amazon-or as it is sometimes written Amazons or Amazonas-has nothing to do with the fabled ladies of Asia Minor, nor with their coal-black sisters of the kingdom of Dahomey. The word is derived from the Iudian word Amassona, or " boat destroyer," a term which the tribes near the mouth not unnaturally applied to the devastating bore already spoken of. Strictly speaking, this name ought only to be applied to the river below the place where the Rio Negro joins it; above that point, on to where the Marañon and the Ucayale unite with it being by native usage called the Solimoens. The other two names are derived by Francis Orellana, one of its carliest explorers, and Manañon who first visited the upper waters in the year 1513. Yañez Pingon (p. 126) was, however, its real discoverer, but the mariner had dreams of great things awaiting him in other lands, and so, like many who have come after him, sailed away from the mouth of the great river to explore those Indies with whieh his name is now so little connected. Physically, as well as politically and socially, Brazil is in many respects widely different from the other parts of South Ameriea. It is in the first phace the largest political division of that part of the continent. It is the only monarehy in Ameriea-if we excent. the European colonies-and the sole region in which the Portuguese language is spesen. It is physically remarkable in so fir that it is exempt from the volcanoes and earthquakeswhich are so familiar to the regions lying north of it, and equally it is free from those long and widespread droughts which make at times so much of America little better than a desert. Moist winds always blow upon the Atlantic, hence most of the country yields rich harvests, tothe agrieulturist, though some parts of the vast empire are arid, and unfivourable to vegetation. Its rivers, moreover, though greater than those of the rest of the continent, are yet in some eases not suited for the purposes of commerce. With the exception of the Amazon, most of the Brazilian rivers are impeded by shallows and eataracts, and, moreover, the best of these do not flow into the ocean direct, but as tribntaries of other rivers. The humid atmosphere canses a luxuriant vegetation, and these two combined make the ordinary roads all but impassable, so that with all its teeming riches, the vast empire is not so well supplied with means of reaehing the interior as some of the other parts of the continent less well waterel, and poorer in resourees.

## The Plant and Animal Laee of Brazif

Is remarkably luxuriant-perhaps the most luxuriant in the world. More than $\mathbf{1 7 , 0 0 0}$ species have already leen deseribed, and doubtless many more remain to be diseovered. In the valley of the Amazon, the area of a circle 1,100 miles in diameter is covered with one dense mass of arboreal vegetation. Prof. Agassiz reports having seen 117 different kinds of valuable woods eut from a piece of land not half a mile square. The chief ornament
of the forests is the paln, represented by from 300 to 400 species, which supply the Indians with all that they need in this life, including food, drink, raiment, shelter, weapons, tools, medieines, \&e. The Morichi Mirita, or Ita paln (Mauritia flexuosa, p. 105), affeets swampy grounds: the Guarani Indians almost live upon its sago, while its fibre wood and sap supply them with house, bed, and board. Among the others may be mentioned the Pashiuba palm (Iriartcic rentricosa, p. 1:9)-the peculiarity of which is that its roots shoot and spread out just above the ground, and then grow obliquely downwards-and the Carnaüba palm (Coperuiciu cerificu). Of the latter every part serves some use, while from the leaves is extracted a wax which is exportel to the amount of $\mathfrak{E 1 5 0 , 0 0 0}$ annually.

The very numerons varieties of valuable and useful woods found in Brazil were well represented at the l'hiladelphia and Paris Exhibitions. The chicf agricultural products are coffee, sugar, riee, cocoa, cotton, tobacco, and herva-mate, and corn, wheat, and oats yield enormous returns to the husbandman, but have not yet become articles of export. Fruits are most abundant, and include those of nearly all clinates. Bamanas, yams, figs, lemons, oranges, and grapes grow in nearly all the provinces. Brazilian nutmegs, tonka beans, and Maranlino cloves are common on the Rio Negro, in the basin of which are numberless trees valuable for the oils and resins they yield. There are several species of vanilla, and the palm-yielding piassaba, used extensively in textile fabries, and the bombax, producing silk cotton, also grow there. Among the other endless vegetable products used as food, for medicine, or for economic purposes, we can only mention the cow tree (Brosinume Gulactodendrou), a species of the order of artoearpals. In Venezuela it, however, attains perfection. It is there known as the Palo de Vaca, or Arbol de Leche, and in the vicinity of Caraeas attains the height of 100 feet, and grows in large forests. It derives its name from the milky juice which is obtained by making incisions in the bark. The milk closely resembles that derived from the cow, and, indeed, is used as a sulstitute for it. Unlike many vegetable " milks," it is parfectly wholesome, and even nourishing, and, in addition, possesses a pleasing balsamic odonr. After a few days' exposure to the air it turns sour, and putrefies. The same name is also sometimes applied to the Hya IIya ('Zuberncemontana utilis), also of South America. The vegetation covering different parts of Brazil is known by various names. For instance, the mullus are the heavy forests which clothe the moist low-lands of the north, an! which also oceur in belts over the central and southern portions of the country. The catiugus are the open woods of the highlands, which lose their leaves during the dry season, and gradnally merge into campos geraes, or open plains, or prairies, and rounded hills covered with grass, and seattered with bushes. The term sertao is now applied to the dry hills, stony parts of the campos unsuited for agriculture, while to the agrienltural belt of the Eastern provinces the term Beira mar is familiarly applied. "Trees split for paling in the neighbourlood of Rio Janeiro," writes Mr. Keith Johnston in his excellent deseription of Brazil, "sends forth shoots and branches immediately, and this whetier the position of the fragments be that in whill they originally grew or inverted. On the lanks of the Amazon the loftiest trees destroy each other by their proximity, and are bound together ly rich and multiform lianes ['bush ropes']. In the province of Maranluno, the roots, grasses, and other plants extending from the shores of pools, weave themselves in time into a kind of vegetable bridge, along which the passenger treads, unaware tiat he has left the firm earth, until the jarrs of a eagman protrule through
the herbnge before him. The vegetable productions of Brazil have a strong analog. with those of Guiana. The most common are the Composite, Leguminosa, E'uphorbiatece, liuthiucea, Aroidece, and ferns of the most varied forms. The vegetation of the valleys differs from that of the campos, as it again dues from that which occurs in the sertios. Along the eoast the mangroves are the most numerous and prominent species. The most maiked peculiarity of this class of plants is, that the seeds begin to shoot before they drop from


the parent plant, and that the drooping braneles strike root into the soil. They are never found inland, exeept where the surface is seareely elevated above the level of the sea. They flourish from the Rio Grande do Sul to Maranhão, converting the land into a morass wherever they are allowed to flourish unmolested. Immediately behind them numerous families of palms raise their graceful heads. The underwond in the neighbourhood of Rio Janeiro consists principally of crotons. Every large river of Brazil has its own appropriate form of vegretable life, giving a peculiar character to its lanks. The vegetation of the Amazon may be dividel into three classes:-(1) That which we find on the islands; ( 2 ) the vegetation upon the banks overtlowed at regular intervals by the
stream, and (3) that which stands high and dry. Tho difference between them consists in the character of the bark and the stems of the plants. Brushwood and herbage are nowhere to be seen; everything tends to the gigantic in size. The most varied forms group awkwardly together, crossed and intertwined with leaves. 'The prepondermee of trees with fenthery foliage, and with glossy, tleshy leaves, lends alternately a tender and luxuriant charaeter to the seene, which is in every other respect painful from its monotony. Representatives of the most estranged natural families grow side ly side. It is only on the islands, where the willow and some other plants are found, that we are reminded of the uniformity of our northern vegetation. Cocoa trees and the vanilla, Cupsicun frutescens, and different kinds of pepper, the cinnamon and sananma (p. 137) trees, and the Brazilian cassia, abound. The flora of all the tributaries of the Amazon is similar to what we have deseribed, until the traveller ascends above the falls, and finds himself in another region. The source of the Madeira alone offers a partial exception, retaining a vegetation indieative of extensiveplains, lakes, and mornsses. The vegetation of the southern campos is widely different. On the plains of the outhern provinees, we find seattered about strong tufts of greyishgreen and hairy grasses, springing from the red clay. Mingled with these are numerous lierbaceons flowers of the most varied colenrs and elegant forms. $\Lambda$ t intervals, small groves of trees seldom exceeding twenty feet in height, so distant that the individual form of each is easily recognised, with spreading fantastic branches, and pale green leaves, break the monotony of the seene. Solitary myrtles, and numerous varieties of pleasing fruits, and now and then a cactus, add to the variety. A similar vegetation, but with a richer variety of plants, occurs in the diamond distriet. On the western declivity of the Serra do Mar, and along the upper banks of the Rio Sano Franciseo, extends a wooded 'eatinga' comntry, of a character entirely different from that which is found in the valleys below, Malce, Euphorliaea, Mimosa, and the like are the prevailing types on the Rio lrancisco. Cactuses, palms, and ferns abound on the Serra do Mar. In this district the ipecacuanha flourishes best. It is, however, in the glowing steppes of Permambuco that we find the eactus predominant. In the valley of the Paraguay the most striking feature is presented by the water plants, which, in one river, are sufficiently strong to impede the mavigation of a stream both deep and broad."

The zoology of Brazil is seareely less remarkable than its botany. Among the animals not indigenous to the country are the horse, ass, sheep, hog, and dog. Herds of horned cattle roam more than half wild over the vast plains of the interior, and game abounds in the wooded regions. Among the wild animals of Brazil are cougars, oeelots, wolves, ileer, sloths, agoutis (p. 77), armadillos, several species of opossum, vampires, jaguars, ant-eaters ( p . 133), the auta, or tapir, the largest South American mammal, the capibara, or water hog, the largest known rodent, otters, and nearly sixty speeies of monkeys. Of birds, there are the king vultures, cagles, hawks, kites, owls, turkeys, geese, ducks, toueans, a great variety of parrots and of hummingbirds, the American ostrich, and an infinite number of small birds of brilliant plumage. These, with the Brazilian butterflies, beetles of brilliant colours, thousands of less gaudy but not less pestilent inseets, are familiar in a score of museums, and much too familiar to the non-entomological traveller. Poisonous serpents, alligators, and turtles abound in the valley and waters of the Amazon, and the rivers and lakes are stocked with an endless
variety of fish, many of which are as yet undeseribed. One of the largest fish is the Pira rucu, which forms the principal food of the people of Para and Amazonas.

## Commerce and Resources.

The nineral resources of the empire include nearly all the useful metals, coals, and many kinds of precious stones and building stones. Of these probably the hematite iton ores are the most valuable. Iron is found in large quantitics in deposits which may be easily ard economically worked, for we are told that they are uiar extensive forests, "which," to quote the official document referred to, "being cut down constantly, reappear within from six to ten years." The resources of the most important iron foundry of the empire are remarkable. "Ore of excellent quality; carbonate of lime for fluxes; refractory elay for building furnaces; sufficient water power for the more important engines, and very good forests," are all found in close proximity to each other. Quarries of excellent marble are found in the vicinity, and comparatively recently a coal mine was discovered within about twenty miles of the works.

Bituminous coal is found, and there are also bels of lignites, bituminous sehists and peat, of which there are large deposits in Brazil. Most of the coal is rather poor, but at Arroyo dos Ratos, in the province of Rio Grande do Sul, it is worked on a small seale for the use of the steamboats which ply on the Lagoa dos Patos, or on the rivers. An English company also works the mines of Candiota in the same province. Gold is found in paying quantities, and is exported; platina, irridium, palladium, tellurium, bismuth, and arsenical pyrites, silver, copper, mereury, manganese, and lead are also exhibited. Many of these are found in paying quantities. Tin and zinc have been found in small deposits. There are a large number of precious stones, including diamonds, emeralds, sapphires, rubies, topaz, beryls, black, blue, and green tourmalines, crystals of remarkable purity, fine amethysts, chalcedonies, opals, agates, and jaspers. Among the other mineral deposits are mica, asbestos, graphite, sulphur, saltpetre, rock salt, alum, building stones, including several kinds of sand stones, granites, and marbles.

The commerce of Brazil has grown and is growing with the development of its resources. The ports of Brazil, chiefly by the influence of Great Britain, were opened to all friendly nations in 1808, and the Government, to encourage commerce, has thrown open the coasting trade to foreign flags. The average annual value of the imports and exports, including bullion and specie, from 1839 to 1844 , was $£ 10,578,550$, the total value of the imports in the years from 1872 to 1876 averaged $£ 17,000,000$, and that of the exports in the same period $£ 17,500,000$.

The commercial transactions of Brazil with other nations from 1864 to 1874 show a balance in favour of Brazil of $£ 33,843,470$, though during that period of ten years the empire maintained a five years' war with Paraguay. The inter-provincial coasting trade followed the foreign maritime trade in its progress, the average importations from 1864 to 1809 being valued at $£ 570,812$, and the average importations from 1869 to $187 \%$ at $£ 10,281,350$. These official data embrace only a small portion of the inland trade, as all merelandise, before being exported and after being imported, passes through many hands. Of the principal nations engaged in the foreign maritime trade of Brazil Great Britain carries 51
per cent. of the imports and 45 per cent. of the exports; lrance, 10 per cent. of the imports and 13 per cent. of the exports; the United States, 4 per eent. of the imports and nearly 21 per cent. of the exports; lortugal, 5 per cent. of the imports and tis per cent. of the exports; Germany, Austria, and Hanseatic cities, 5 per cent. of the imports and uearly $3 \frac{1}{2}$ per cent. of the exports; the River Plate, 9 per cent. of the imports and特 per cent. of the exports. In 1876 Brazil exported to Great Britain $£ 5,178,356$ worth of goods, and in return imported $£ 5,919,758$ worth of British manufactures and other produce. Both these figures show a falling off from the six or seven years. Rnw eotton, coffee, and unrefined sugar form the chief Brazilian staple which we import, the guantity of the former (cotton) being in $1870,476,512$ ewt., valued at $\mathfrak{f 1 , 4 9 7 , 2 2 5}$. The sugar imported in the same year was $1,279,102$ ewt., worth $\{1,220,362$. In return Brazil tukes from us manufaetured cottons, wrought and unwrought iron, linens, woollens, \&c. The custom duties, in aecordanee with the suicidal poliey of South Ameriea-political economy being an unhealthy plant in the New World-ranges from 40 to 50 per cent. "The practice of sucking the marrow out of the agricultural organisation, by the imposition of enormous export duties, has rendered the aceumulation of eapital an impossibility.* At the commencement of 1 s 77 , aceording to Martin, there were $1,43 \mathrm{~S}$ miles of railway open to traffic, and 800 more in course of construction. In the same year the mumber of miles of telegraph construeted may be given at 3,500 .

Brazil possesses every climate fomal within the tropieal and temperate zones, the low lying regions being very unbealthy, and utterly unfitted for Europeans, while the ligher lying regions are very salubrious. Yet so great is the empire that it is estimated that not over one acre in 200 is under cultivation, and in some of the provinces, especially those near the sea, the amount of grain raised is not suflicient to feed the population. 'The forest supplies the greatest vegetable riches of the country. Page after page could be filled with the mere names of the ceonomic plants of this immense country, and yet the list would not be exbausted. Coeon grows wild, and is exported to a considetuble extent. The Ibiripitanga, or Brazil wood (Cesalpinia Brusiliensis), which takes a beautiful polish, and yields a fine dye, is a Government monopoly, and bence known as the pao de ruinho-the Queen's wood-has been so recklessly eut in the regions near the coast, that it is not now so abundant as it once was. The trumpet-tree (Cecropiu peltatu), the tapea, or garlic pear-tree, the laurel, the soap-tree, the various palms, the banana, custard apple, guava, the various kinds of nuts, including the Brazil nut (Bertholletia e.rerfsu), and the wellknown indiarubber tree, may be included among the better-known products of the Brazilian forests. The Brazilian indiarubber is derived from a number of speeies of Siphonia (principally S. elustica, Brasiliensis, lutea and brerifolia) and probably other trees. Siphoniu elusticu is the guava tree, $S$. Brasiliensis the one common in the forests of Para, though on the Upper Amazon the two latter seem to prevail. They are called by the Brazilians seringa trees-the loeality where they grow, a seringal-from the Portuguese word seringa, signifying a syringe, the caoutchouc having been originally used in making these instruments. The trees vary from 25 to 70 , or even 100 feet in height, and all yield a milky juice, though

[^50]the "gum" which is yielded by this juiee is not equally grod in nll of them. In some it is too brittle for ceonomic purposes. The raw seeds are poisonous to man and the lower animals, though the macaws eat them greedily, and they are aceounted excellent boit for fish. Long boiling, however, deprives them of their poisonous principles, and renders them patatable. Though M. de la Condamine made us aequainted with "indiarubber" us early as 1730, it is only within the last forty or fifty years that it las become an important element in our arts and manufactures. The white juice is collected ly making an incision in the bark of tho trunks, and collecting it in little carthenware vessels. The milk is then poured upon moulds, and immediately held over the dense smoke made by burning the nuts of the urucuri palms (Allalea excelsa and Cocos coronata) until it is sufficiently hurd to bear another coating, when the process is repeated until the requisite thickness is obtained. The moulds are then removed. This aceounts for the blackness of the indiarubber as wo see it in commeree; the coagulation is, however, solely produced by the heat of tho smoke, and Mr. Cross is of opinion that equally good indiarubiber could be produced by putting the milk in shallow vessels, and evaporating the watery partieles by the heat of boiling water. Formerly these moulds wero-necording io Mr. A. Smith-always in the form of shoes or bottles, and hence one of the kinds of caoutchoue is known commereailly as bottle-rubber; but they are now frequently shaped something like battledores for folding linen, only thinner. In 1873-74, 14,819,890 lbs. of this "gum," valued at $£ 1,069,477$, were exported. In 1875-76, the amount was a trille less, but as the cultivation of the tree has regularly commenced, we may, in time, expect the amount to be largely inereased, and the business put on a less precarions, and altogether a more satisfactory, footing than the present haphazard method of collecting the "gum," and the consequent reckless destruction of large numbers of half-grown trees, without any effort being made to replace them. Mr. Cross, who introluced the caoutchonc-yielding Custillou tree from the Isthmus of Panama into India, was, in 1876, employed to colleet the Siphonite plants of Brazil, with a view to their cultivation in India. He gives an interesting account not only of the plant, but also of the social surroundings of the people in the indiarubler region, which, in connection with the subject of Brazilian products, may be usefully annotated here and there. Para, which is "jumping-off" place to the Seringals, is a eity on the southern bauk of the Amazon, eiglity miles from the ocean, of about 40,000 inhabitants. Everything is dear, and notwithsianding the reputed fertility of the Amazon valley, nearly all the necessaries of life are imported. The butter and fish come from Norway, rice and flour from the United States, while sugar, coffee, and mandioca are brought from the southern ports of Brazil. The import duties-in some enses amounting to 25 per cent.-make everything expensive. The houses are for the most part built of mud, roofed with tiles. "The windows are chiefly formed of wood, hinged at the top, and push out from below, whence the inmates unseen obtiin views of the street and passers by. Throughout the course of the day many of the occupants are invariably congregated behind these window lids. The great bulk of the eitizens go out more ostentatiously dressed than the people of London, the attire considered essential being a fine llack cont and lat, with snow-white ironed vest and trousers, and fancy French boots. Those who do not confornn to the style of dress are stared at. Even at the beginning, I did not agree with the fashion, and afterwards was further removed from it, by being
nlmost duily bedaubed over with the mud of the gands [or deep gully-like natural ditenes, which often penetrate for many miles into the interior of the vast forest region surrounding the city, and are daily filled by the tide]. Coloured females and slaves may bo seen stepping into earringes perfeetly loaled with large neeklaces and glittering ornaments, and even the fumilies of foreign residents are often dressed in tho most excessive and extraordinury manner. Merehandise and other effects are removed from one place to another in the ohd primitive way, thus employing many hands who earn high wages. limigraut lortuguese, of whom there are about 5,000 , are mostly the earriers, boatmen, and shopkepers of the place. The supply of water for the eity is earten throngh the streets in barrels, and sold at the rato of three halfpence per polo. Tho poto contains twenty-ono English imperiul pints. Within twelve hours alter being deposited, the water is found to precipitate a greenish substance, amounting to nearly one-fourth the quantity, which is not removed even if filtered through several folds of stout eloth. In the eourtyard of the majority of the houses is an open cesspool, which, in such a glowing atmosphere, may assist in developing much sickness. Dysentery, yellow fever, and various other forms of a typhoid charneter, appear to be permanent, though of late there has been no serions outbreak, and the place is reportel more healthy than formerly. Tetanus and other forms of nervous affections are of frequent occurrenee, espeeially among the native-born population." The province of Para, and the islands seattered over the lower portion of the Amazon, are the chief indiarubber colleeting localities. The trees, when often tapped, present, up to a height of ten or twelve feet, "cne swollen mass of warty protuberances and knots, covered with thick seales and flakes of hard dry bark." The colleetor makes use of a small axe-like instrument an inch broad, which, at each stroke, euts through the bark, and into the wood for fully an inch. A layer of wood forms over the injured part at the expense of the bark and general vitality of the tree. "The newly-formed wood is again cut into and splintered, and so the process is repeated on each successive layer, until the trunk becomes merely a mass of twisted, wrinkled wood, with very thin bark. In this condition hardly any milk flows from the cuts, and although for years a few green leaves may continue to sprout from the points of the twigs, yet the tree may be considered as dead, and, in fact, finally withers away. It is therefore the injury done to the wood, and not the overtapping, which lessens the flow of the milk, and ultimately eauses the death of the tree. The cuts in the wood are, of course, unnecessary, since the milk is only met with in the bark." *

Coffee is another Brazilian staple. At the Philadelphia Exhibition there was an immense display of this in a pavilion made of raw eotton, and in the Puris Exposition there was even a finer show of the different qualities cultivated throughout the empirc. The coffee tree seems to have been introdueed into Brazil about tho middle of the cighteenth eentury, the seeds having been earried from French Guiana to the Amazon, where the cultivation was only undertaken after the promulgation of the decree of May, 1761, exempting the new product from custom house duties. Jt was not, however, until 1810 that it got into favour outside the bounds of the country in which it was grown.

[^51]This was owing to the superior modes of eultivation introduced by Dr. Leeesne, a planter expelled from San Domingo, who had settled near Rio. At present Rio de Janeiro, Sũo Paulo, Minas Gerães, and other Brazilian provineeş contain immense forests of coffee trees, and for the preparation of the product the latest improved machinery is used. Coffee grown ou the high lands of Brazil is preferred for its aroma to that grown in the bottom lands. Both the washed and sun-dried coffee of Brazil find ready sale in the commercial cities of Europe. France, England, and Italy prefer the aromatic washed coffee; Russia,


FIEW OF SANTABEM, ON TIE AMLZON, IUOYINCE OF FARA, BHAZIL.
Denmark, and Germany the bitter sum-driei eoffec. Brazilian merchants chaim that their coffec is not inferior to that of any sountry in the world, and it is well known that Brazilian coffee is sold in all markets as coming from other places. Professor Agassiz, while in Brazil, wrote: "More than one-half the coffee eonsumed in the world is of Brazilian growth. And yet the eoffer of Brazil has little reputation, and is even greatly underratecl." Coffee represents more than one-half the total values of the exports of Brazil. In 1873 to 1874 the exports of coffee were $370,448,064$ hs., valued at $£ 12,107,578$, and of this export something more than one-half was sent to the United States. (p. 141.)

The eotion phant has been enltivated in Brazil for centuries, principally in the northern provinees. It grows best in the table-lands of these provinces, partienlarly in those ef Mar:unhăo and Pernandbuco. For a considerable time, however, the culture was on a limited

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## Coffee

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scale, chiefly for want of a market. The rehellion in this country, however, caused a demand for Buzilian cotton, which encouraged the planters, and led to the opening of railroads for the transportation of the product to scaports, and since then the eultivation of cotton has become an important industry even in the southern provinces. The exports of cotton in 1573-74 amounted to $119,843,077$ lbs., valued at $£ 2,599,465$, but at present it is rather ever $£ 3,000,000$. Sugar has been already referred to. The soil is peculiarly fitted for it, and in $1873-7 \%, 310,593,3: 27 \mathrm{lbs}$. were exported, of which


COFFEE GAT*EMING IN MHAZIL.
England and the United States took the greater part. This, whieh was ehiefly produced in the distriets adjoining Bahia, was valued at $£ 3,1: 20: 000$. Tobaceo grows wild in great abundanee, and in the provinees of Bahia Minas, Sã Panlo, Para, and in some localities of Rio de Janciro it is eultivated extensively, and exported to the value of between $£ 700,000$ and $£ 800,000$ anmually. It is said by the Brazilians to compete with that of Havana, but in this belief they are peenliar. If it does compete, the result is not ir favour of the comparative leaf of Brazil, but of the superlative product of Cuba, which still hoils its first place in smokers' estecm.

The lerra (yerba) mate, or Paraguay cea, is one of the Brazilian products. We shall have oceasion to further refer to it when we come to Paragnay, of which it is the staple, so that it may be briefly dismissed here. It is principally indigencus to the southern provinces of Rio Grande, Santa Calharima, and Parana. Several attempts have been made
to cultivate it, but as yet the greater part of the "tea" is made from the leaves of the wild plants gathered in the woods. About $£ 300,000$ to $£ 400,000$ worth is annually exported, but almost solely to the River Plate. This product, which appears in commerce in the form of broken leaves and in powder, is the leaf of the mate tree (Ilex curitibensin), a species of holly, and is used as a beverage. It is said to possess two great advantages over tea and coffee, in being less exciting and cheaper. It is used as a daily drink in the southern provinces of Brazil, and constitutes one of the most important articles of commerce of that region. A packet of mate, eontaining a little more than 1,0 pounds, costs 10d. The exports of herva mate amount to about $30,000,000 \mathrm{lbs}$ ammaly, worth over $£ 250,000$, and the home consumption (exelusive of the large quantities used by the native population) amounts to about $40,000,000 \mathrm{lbs}$ anuually. On this basis it is estimated that where a supply of herva mate for a daily beverage would cost 16 s . per annum, an equivalent supply of coffee would cost $£ 33 \mathrm{~s}$., and an equal quantity of tea from $£ 10$ to $£ 20$. Dr. Sehnepp, after travelling through Brazil, said of herva, "Alone and independent of any other nourishment, the iufusion of mate will sustain strength and vigour during whole days."

Raw hides form another Brazilian export. Stock-breeding may be carried on in all parts of the empire, but the industry has only been developed to any extent in a few of the provinees. It is estimated that there are at present in the empire $20,000,000$ head of horned cattle. Large quantities of hides are used in Brazil in manufactures, and the exports in 1873 to 1874 amounted to $47,602,143$ llss., valued at $£ 1,271,489$. The forest produets have been already referred to, so that, inviting as the subject is, the commerce in timber and ornamental woods must be briefly dismissed. How extensive this is, or may be, can be inferred from the faet that in the Philadelphia Exhibition-and equally in the Paris oneas well as in the museum at Rio, over one thousand speeimens in blocks, boards, and logs, cut and planed, and either wholly or partially varnished, to show the grain of the wood, and their quality as deeorative woods, eapable of being polished, were exhibited. There are varieties of jacaranda, or rosewood, whieh are very fine in culour and texture, and sreeptible of a high polish. There is also stonewood, or pottery tree (IToquiller utilis), in the Amazon valley, from the ashes of which earthenware can be made, coraiba, valuable for the oil which it yields, as well as for its timber ; Brazil-wood,* wheh is celebrated for the colouring matter it contains, and bow wood and macaramduba, waieh are used in cabinet making. From the last is obtained a white liquid used as milk in tea or coffee, like the Palo de Vaea, or dried and used as a substitute for indiarubber. The berk, whieh is rich in tamin, is used for dyeing. Logs 100 feet long squared from these trees are $\mathrm{m}^{+}$nnonmmon. Besides these, there are from 300 to 400 species of the palm, many varieties of mahogany, eedar, iron-wood, \&e. The palms, besides furnishing good building timber, bear valuable fruits, such as the cocoa-nut, yield wax, oil, stareh, materials for cloth and cordage, and the sap, roots, and llowers have medicinal properties. Nearly all the woods are of good textire and

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Brazil, pleasant though it may seem to those whose previous experienee of the sun lauds have been in such unsavoury stews as the low lands of Mexico, or the feverish Spanish Main, immediately to the south. The following table (collated with, and corrected by, various data) shows at once the population, free and bond, of the twenty-one provinces into which the empire is divided, with the estimated area, aceording to the census of 1872:-

| Provinces. | Square Miles. | Populution. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Free People. | Slaves. | Total. |
| Amazonas | 753,439 | 56,631 | 979 | 57,610 |
| Para . | 412,467 | 232,622 | 27,199 | 259,821 |
| Maranhão | 141,651 | 284,101 | 74,939 | 359,040 |
| Piauhy | 81,779 | 178,427 | 23,785 | 202,222 |
| C'eará | 50,262 | 689,773 | 31,913 | 721,686 |
| Rio Grande do Norto | 20,129 | 220,959 | 13,020 | 233,980 |
| Parahyba | 20,346 | 341,643 | 20,914 | 362,557 |
| Pernambuco | 46,257 | 752,511 | 89,028 | 841,539 |
| Alagotas . | 11,642 | 312,268 | 35,741 | 318,009 |
| Sergipo . | 12,038 | 139,812 | 22,623 | 176,243 |
| Bahia ${ }^{\text {a }}$ | 204,803 | 1,120,846 | 162,295 | 1,283,141 |
| Espinito Santo | 17,029 | [59,478 | $\underline{21,945}$ | 82,137 |
| Rio de Janciro ? |  | 490,087 | -0,726 | 782,724 |
| Municipio Neutro ${ }^{\text {a }}$ | 18,480 | 296,033 | 48,939 | - 74,972 |
| Sŭo Paulo | 90,511 | 680,742 | 156,612 | 837,354 |
| I'urani | 108,557 | 116,162 | 10,560 | 126,722 |
| Santa Catherina | 18,92.4 | 144,818 | 14,984 | 1:99,802 |
| Rio Grande do Sul | 110,211 | 364,022 | 67,991 | 434,813 |
| Minas Geries . | 237,481 | 1,642,449 | 366,574 | $2,009,023$ |
| Goyaz | 263,372 | 149,743 | 10,652 | 160,395 |
| Matto Grosso | 668,65\% | 53,758 | 6,667 | 60,417 |
| Total . | 3,288,071 | 8,190,383 | 1,476,988 | 9,667,371 |

In addition to this census-which was made partly from actual enumeration and partiy from estimate-about $177, \mathrm{Sl3}$ people "belonging to districts not enumerated," may bo added to the total. A later return of the slaves was made in 1875, which shows their number at 1,419,900, but Mr. Consul Morgan, in September, 1876, recorded their number to be not more than $1,409,448$, which is nearly $1,100,000$ less than they were in 1850 . Slavery is, however, in Brazil of exceedingly small extent, and will soon become altogether extinct. All children born after 28th September, 1871, are considered free, though they are bound to serve their mother's owner for a term of twenty-one years under the name of apprentices. But, though they are put under very strict regulations, the " matriculated" apprentices can bring a suit in a criminal court against their masters, should they be excessively punished. This court has also the power of freeing them shonld it consider further serviee under such a taskmaster undesirable. The Government slaves, to the number of 1,600 , were also emancipated, after remaining for four years under the eye of the State. They are, however, wisely compelled to hire themselves out, or otherwise labour, we suppose, though the terms of the statute does not say so (Elles sino obrigados à contraetar seus serviços), under penalty of being compelled to work in the public establishments. Whether this change-bronght about, not so much by any alteration in the sentiments of Brazilian society, but in deference to European and North Ameriean opinion-will work well, is doubtful. Much of Brazil cannot be cultivated by white labour, the experiment of introducing European emigrants having

in the great number of cases proved great failures to the country, and misery, if not death, to the deluded would-be settlers.

The population of Brazil is rather a mixed one. The basis is Portuguese, but as in early times few of the colonists brought with them wives of their own race, the result of this social system was, by-and-by, a vast brood of Indo-Portuguese half-breds, who in many cases adopted the manner of their fathers, while claiming their name and country. The Africans, who formerly were brought wholesale to the country from their native land, added another and even less favourable element to the population of the empire, and finally a large influx of Germans, Swiss, Italians, and Frenchmen has of late years done much to raise the tone of the people, especially in the seaports, where the chief part of the iuhabitants are of European descent. The official census put the Caucasians at $3,787,289$, the Africans at $1,954,452$, and the native Indians at $3,801,782$, though, it is needless to say, a great proportion of each of these three races is mixed with the blood of the other two. Again, about $8,176,191$ are Brazilians, and of the 243,481 strangers, 121,248 are Portuguese, 45,820 Germans, 44,580 Africans, and 6,108 French and other nationalities. Of the slaves, $1,372,246$ were born in Brazil, and 138,560 in other countries. There is an entire absence of class distinction on account of colour.

Fair provision has been made for the education of the people, and in this, as in the organisation of the judiciary, penal establishments, asylums, \&c., advantage is taken by the enlightened Government of Dom Pedro II. of the experience of Europe and the United States. The efforts of Government to develop the country are meeting with deserved success. Still education is very backward. In 1874 there were only 140,000 pupils at school; but as it is entirely out of the hands of the priests, being in the capital under the charge of the General Assembly, and in the provinces under the Provincial Assemblies, and is to "become compulsory as soon as the Government considers it opportune," a better state of matters may dawn. Though Roman Catholicism is the State religion, all other faiths are tolerated, yet in building their places of worship the "heretics" must not give them "the exterior form of temples." Religious persecution is expressly forbidden; still the clergy exercise an enormous influence, direct and indirect, throughont the empire. Their pay is poor, and their dependence on the State so abject, that the sacred office does not attract to it the highest talent, or even morals. Ecelesiastical preferments are often bestowed on worthless persons as rewards for services rendered to a Minister of State in canvassing for votes at elections. Hence, "the true Pope of Brazil is the Minister of the Empire."* The priests are also, for the most part, very ignorant, and consider true religion and good morals best advanced by parading through the streets tawdry dressed images of saints, followed by a straggling procession of devotees, lay and ecclesiastical, from the stately marquis to the humble negro. The evening ends with fireworks; and sometimes, late at night, the police find it necessary to take care of those who commenced the day by assisting at a sublime rite of the Church, and ended it by a drunken brawl, if not by a murder. The revenue was, in 1872-73, $£ 11,213,110$, and the expenditure, $£ 12,187,446$, though for 1877 these were nearly a million lower. The total debt of the country was, in $1876, £ 73,580,890$, nearly two-thirds of which were incurred by the costly Paraguayan war. The floating debt is, in addition, about $£ 51,000,000$; but as Brazil bas not

[^53]yet arrived at that stage of civilisation which consists in borrowing and not paying, the credit of Dom Pedro's empire stands well in the world which concerns itself with loans and the per centages thereon. The army of Brazil is fixed at 20,000 on the peace footing, and 32,000 in war time, though there are rarely so many under arms. Conscription and liberal bounties, in the shape of money and land grants at the end of fourteen years, are sufficient inducements for large numbers to enlist ; but in cases of extreme need impressment has been resorted to. In 1877 the navy consisted of fifty-six vessels, nineteen of them ironclads, in addition to several other vessels acting as guard ships in the different harbours. The principal cities of the empire are Rio de Janeiro, which, with its eight suburbs, had, in 1872, a population of 503,715 ; Bahia, 128,929; Pernambuco or Recife, 116,671; Maranhão, 31,604; Para (or Belem), 35,000; São Paulo, 25,000; Porto Alegre, 25,000; and Ouro Preto, 20,000 inhabitants. A completo system of railroad and water communication between the several parts of the empire has been devised, and in addition to the railroads in operation, in course of construction, or under survey, the lines of river communication assisted by Government are estimated at 24,500 miles, while there are other lines in the hands of private companies.

The prineipal port of Brazil is the capital, Rio de Janeiro, which, with the surrounding district, is a neutral prineipality, independent of the province of the same name, and, like the district of Columbia, in the United States, is under the direct administration of the Government and General Assembly. It is situated on the west side of a vast bay, and consists of an old and new town, the latter of which dates from 1808, and is separated from the former by an open space called the Campo do Honra. It is well supplied with schools, churches, asylums, and public institutions of all kinds, nearly all built within the last half century. The bay or inlet of Rio is seventeen miles in length ond eleven miles in extreme width. The eity is, from its position, the chief business place of Brazil, and especially of the rich provinces of Minas Gerũes, and Goyaz.

The voyager who first sees spread out before him the splendid Bay of Rio de Janeiro cannot fail to acknowledge that though in the world there may be fairer scenes, he is a fartravelled man who can honestly say that he has seen any such. Coming in from the north, the vessel rounds the rugged headland of Cape Frio. From thence the land is low, and sandy near the beach; but a little way in the interior is backed by hills or mountains of varied, and even picturesque contour. Then we come to Cape Negro, and thence the scenery to the entrance of the harbour is often beautiful, and always interesting. Straight in front of us is the harbour, on either side the Pão de Assucar (Sugar-loaf), the Coreovado (Hunchback) 2,600 feet high-the Gavéa (Topsail), and the Dois Irmãos (the Two Brothers), and other mountains of singular form and great height, while at thirty or forty miles distant can be seen the peaks of the Organ Mountains (p. 125) towering through the haze to the height of 7,000 or 8,000 feet. Often when the landscape is in early morning shrouded in fog, their peaks peering through the blankets of clouds serve as guides to the shipmasters making for the port. When near the Pão de Assucar-a conical mountain-the gorge opens, and exposes the calm expanse of what is probably the finest harbour known to commerce. "The first appearance of the Bay of Rio Janeiro to a stranger," writes the editor of the Anglo-Brazilian Times, " is certainly the most picturesque in the world, with its surrounding verdure-covered
mountains, and their easy slopes covered with the richest green, plantations of all kinds, handsome country seats, and well-cultivated islands ornament and diversify the surface of the little inland sea of 105 miles circumference; and, taken in all, there is not perhaps a sight elsewhere more imposing and agreeable. To the north you see, at a distance of forty miles, the Organ Mountains, reaching along the horizon; to the left the Corcovado extends its peak over the Sugar-loaf. Hill after hill meets the eye, until the city, expanding to the view, spreads, like aucient Rome, over the amphitheatre of its seven hills and intervening valleys."


NiEN of "the isle of sehients." in the bay of ho de janeino.
Mr. Hinchliff is equally enthusiastic. He assures his readers, that whatever fate may a a wait them in Utopia or Sirenia, they may be pretty sure that nothing more lovely will ever be seen in this revolving world. The suburbs of the city are also beautiful, and afford endless spots for excursions. From the Castle Hill the city and its surroundings can be excellently surveyed. From this height, or still better, from the Corcovado, the environs of the Brazilian capital, studded with beautiful villas, and the extensive gardens that supply the town with vegetables, can be seen to great advantage. Descend and examine them more closely, and you will find flowers that are only familiar as exotics in Europe ; and trees, the richness of which in flower and foliage will be surprising even to those who know the cool, umbrageous forests of the north. Chief among these are the mangos (Mangifera Indica), a tree which,
though a native of Hindostan, has grown to great perfection in Brazil and other tropieal countries. The weary eye cannot rest on a pleasanter pieture than an avenue of these beautiful

niew of the atenee of palms in the botanic oardens, ho de janeiro.
trees. laden with their delightful fruit and clothed with a verdure that scents the air for miles around. Another favourite evening excursion of the Rio de Janeirans is the Cova d'Onça (the Ounce's Den), at the summit of the hill of Santa Thereza. From this elevation can be seen a panorama of mountain, valley, forest, garden, and harbour, the commingling
of which is singularly beautiful. Botafogo (p. 145), one of the pretty inlets off the Bay of Rio de Janciro, and about three miles south of the city, is another familiar place of resort, omnibuses running to it cvery half hour, and steamboats morning and evening. The former route takes us along a road lined with the beautiful palacetes of the Brazilian grandees, while at Botafogo can be seen the spleadid entrance to the Botanic Gardens, chiefly remarkable for the magnificent avenue of palm-trees (p. 149). Botafogo and Gloria may be called the west-end of Rio, for here are the residences of the chicf people, and of most of the English and other foreign residents. The beautiful valley of Tijuca is another, but more distant, locality beloved of the Rio people, who are fond of country residences not too remote from the city. The undulated forest-covered hills and cascades form here a series of almost fairy-like loveliness; while 1 rom the hills around the Atlantic can be seen, and from the slope, as the visitor returns to the city, an extensive prospect of cultivated land, interspersed with chacaras, or country seats.* Three miles from the city is San Christovão, the winter residence of the Emperor, though in the summer the Court is usually at Petropolis (p. 128), an Italian-looking villa, surrounded by a village in the Organ Mountains, some fer hours distant from Rio by steamer, rail, and road, and a most charming place of residence. Rio itself is a fine, but a hot, dear, and dirty city; in which characteristic it does not stand alone among tropical towns. Dark faces are the rule, but black ones are also exceedingly common. The market men and women are usually of African race, and so dirty that even the good wearing complexion with which Nature has endowed them is not sufficient to conceal the fact from either eye or nose. Yet if the sellers are unpleasant, the articles for sale are not. There are mounds of the most delicions oranges, stalls covered with very ugly, but probably for the tropics very excellent fishes; and prawns, reputed to be the finest in the world, and when curried, said by gourmands to be a dish worth visiting the tropics for, are among the hundred articles offered to the languid lookers on. The buildings are, as a rule, not handsome; and most of the streets are excessively narrow. Everything is dearer here than in any other part of Brazil, the rents in the best parts being enormously high, and the charges, of course, correspondingly outrageous. Hotels are few, bad, and expensive ; but neat cabriolets and abundance of omnibuses render locomotion easy. The wealth, or, at least, the love of show in the inhabitants, is displayed in the equipages, which become in the tropics almost necessaries, driven by negro coachmen, and guarded by sable footmen arrayed in liveries so gorgeous that, compared with these individuals, Solomon in all his glory was but a plainly-dressed Hebraic gentleman, with possibly the national taste for jewellery and loud colours. Most of these carriages are drawn by mules, but the very great grandees will, in addition, have three or four negroes, mounted on mules, to bring up the rear. The heat of Rio seems to have little effect upon the eager crowd of busy men intent on moncy-getting. The Exchange is crowded during business hours, and loungers seem out of their element. "Everybody looks," writes Mr. Hinchliff, "as if his whole existence depended upon some transaction in sugar, coffee, or tobaceo. Immense numbers of negroes crowd continually up and down the streets with heavy bags and bales, keeping always on the move like strings of ants, laughing, joking, and singing, as they trot alongg with their burdens." $\dagger$ It is, however, only fair to say that, of late years, thanks to the display of some

[^54]energy on the part of the authorities, those amenities of Rio which are bound up with eleanliness have vastly inereased. At one time the suburbs of the eity were very healthy, but about thirty years ago yellow fever suddenly arrived and scourged the neighbourhood. It has since regularly elaimed a few vietims, especially in the hot months of January, February, and Mareh. Returning to the capital, the visitor cannot but note the poor accommodation most of the houses afford for sleeping. The bedrooms are generally without windows, the Brazilians' love of grandeur causing them to devote their best rooms to the purposes of ostentation. Each floor, as in European continental houses, is usually the home of one family. The Bank of Brazil, the Hospital da Misericordia, and a few private residences, are about the only buildings of the city which would attract the stranger's attention as being worthy of any note. Education is well attended to; and under the fostering eare of the Emperor, a University, as well as Historieal, Geographieal, Fine Art, Agrieultural, and Medical Societies flourish.

Bahia, or San Salvador (p. 157), was at one time the eapital of the empire, and still maintains the rank of being the second city in it. The bay on which it is situated is beautiful; but that part of the town which is erected on the low land at the foot of the hill is elose, filthy, and dilapidated, and hence is apt to give the passing traveller an unfavourable, and perhaps erroncous impression of the "City of the Bay." The upper town, however, contains many fine mansions; while in the neighbourhood of Victoria are the residences of the chief foreign merchants. Pernambuco is the third town of Brazil; but in reality it consists of four towns, whieh are getting gradually run together, though at present at some little distanee from each other. Pernambueo is the centre of the Brazilian coasting trade, and its foreign trade is only second to that of Rio and Bahia. Santarem (p. 140), on the Amazon-in the Province of Paramay be taken as a type of a third-rate provincial "eity" in Brazil; while the view of the Isle of Serpents (p. 148), and the sketch (Plate XXV.) afford speeimens of the pieturesque seenery of the Brazilian shores and of the banks of the great river of Ameriea. It is, however, far into the interior of this vast empire that the student of mankind ought to seek the Brazilian, unadulterated by the admixture of his manners and modes of thought with those of the Europeans, or of the Parisian glossed dwellers in eities. Let us, therefore, as a preliminary to a few sketehes of Brazilian manners, visit hastily one or two of the main unbeaten tracts of the empire. The explorations for railroads have allowed two eminent engineers, Messrs. Bigg-Wither and Wells, to do so ; and as perhaps the most convenient way of conveying the notes we have made of these gentlemen's journeys, we may take each of them briefly in succession. Mr. Bigg-Wither went up the Valley of the Tibagy, a feeder of the Paranapanema, which, in its turn, is a tributary of the great Parana, which flows through several of the southern provinees of the empire, and finally empties itself into that estuary of several rivers, which gets the name of the River Plate. First, however, a few words about the Valley of the Ivaly-a more Southern tributary of the Parana-or, at least, that seetion of it which lies between Colonia Thereza and the Corredeira de Ferro, or Iron Rapid. The country between these two points is generally broken and mountainous, covered by dense tropical or semi-tropical forests, and inhabited by wild Indian tribes (pp. 152, 153). Some of these are the Botueudos, whose curious lip "ornament" (sic), almost identieal with that of the Hydah Indians, in Queen Charlotte's Island, we have figured
(p. 100). A raee even more formidable are the Coroados, chiefly collected in the distriet between the Salto das Banaueiras and the Iron lapids. The very name of Bugre, or wild Indian, is a terror to the ordinary Brazilian; hence the difficulty of exploring the country which they inhabit. The Tilugy Valley, therefore, offers an easier route to the interior in this direction. In the immediate neighbourhood of Tibagy are large deposits of clays and gravels, in the latter of which diamonds are found. The climate in the upper part of the valley is temperate. In the months of May and June the evenings are frosty, but the days as bright and warm. The air is invigorating; and, contrary to the usually received opinion, that the nearer the equator the greater becomes the requirement for stimulants, on these prairie regions the buman constitution, according to Mr. Bigg-Wither's

experience, feels a less craving for stimulating drinks than it does in higher latitudes. The population of Tibagy and its neighbourhood is about 3,000 . The people, who bave the blood of three distinct races in their veins, namely, Indian, Negro, and Portuguese, are agricultural, and though neither enterprising nor hard-working, are a frugal and contented race. "Their triple nature exbibits an odd mixture of good and bad qualities, and it is only to be understood by long and intimate acquaintanee with them. Hospitality to all comers is their great creed, and one which the traveller most appreciates. General laziness, beth of mind and body, is the characteristic of all but the richer classes of the people. This bad quality certainly cannot be produced by the elimate, but is, more probably, inherent in their nature itself, and is, no doubt fostered by the extreme ease with which their livelihood can be obtained. The result is that, with the wealth of a kingdom around them, they are content to pass their lives in a state but little less brutal than that of the wild Indians. This picture is only a production of what may be seen in so many other of the outlying settlements of the interior of Brazil; and the thought cannot help foreing itself upon the mind of the traveller who sees all this, that the people are not worthy of the country." At 1,600 or 1,700 feet above
district or wild country to the deposits o upper gs are to the ent for Tither's
the sea level pine-trees become common. Below this line they suddenly and completely disappear, und their place is tuken by more tropical types of vegetation. On the umbrelladike summits of the tall trees- 130 to 140 feet in height-innumerable fleeks of parrots, Brazilian juys, and monkeys nestle during the fruit season. In the midst of these forests the explorer suldenly eomes on that, bare little patches of campo or prairie, unlike their surroundings. Many of these patches are indeed so flat that the water from the surrounding more or less undulating forest permeating them, they beeome more like swamps than anything else. These phenomena are probably due to old voleanio action, which has thrown

out masses of lava. The action of the weather has worn away the surromeling rock, converting it into soil, so as to enable it to bear a tree growth, but in these campos has been unable to affeet the harder strata, or vitrified sandstone, thus leaving a shell' of soll too poor to support forest. Here, then, is a vast region covered with a fertile soil and a dense growth of virgin forest, but inhabited only by a few wandering tribes of Indians, and likely to be in a state of nature for ages yet to come, unless, indeed, the long-meditated road is constructed down the valley. The jaguar, or South American tiger (Felix onccu), exhilits great boldness in this wild traet, which it has so long considered its especial home; but wild pigs, tapirs, and deer are also very abundant. Jatahy is another of these stagnant backwood Brazilian villages, which seem normal to the country whenever the busy coast region or that in the immediate vicinity of the great rivers is left behind. Mr. Bigg-Wither sums up his
views of this district in the following words, which I prefer to give in their entirety:-"This region," he ichanks, "contains within itself every variety of climate, from the temperate to the tropical, and is suitable for the production of all kinds of necessary food. It has its pastures for the breeding of cattle, and its rich forest land for the cultivation of the various kinds* of vegetable produce. Water and timber abound everywhere; and the climate throughoui is unsurpassable in its salubrity. What, then, is wanting in order that these greati natural advantages may be utilised? The answer seems plais. What is wanting is a more enterprising, mergetie, and, above all, honest raee to take the place of the mongrel native. With this change everything else would follow. The Government is already liberal in its support; but, as everybody there knows, not one-tenth of the funds supplied ever go to their legitimate object. They are, in plain language, appropriated by the various officials through whose hands they have to pass. It is this pervading low standard of morality which has hitherto paralysed, and will continue to paralyse, the development of the country. Now, of all parts of the province of Parana, this distriet is the most suitable for the foundation of an English colony. If, therefore, instead of spending thoussnds of pounds in the attempt to establish an Einglish colony at Assungui, about which we heard so mueh a few years ago, which place, buried is it is among a mass of hills, mountains, and impenetrable forests, is altogether unsuited to the purpose, the same money bad been spent in founding the colony on a spot whose progressive capabilities were a matter of certainty, and where ample room existed for its development, much eredit might have been saved to the Brazilian Government and great profit gained ly both parties." Tropical colonies, when the white man has to be himself the labourer, ean never sueceed. Hence an English settlement in Brazil, should such a settlement be persisted in, must be formed in a temperate region, and on the border of the foresi, not in its depths. At Curitba a large and thriving German population has sprung ur and prospered out of very smali beginnings, simply beeause the country and climate are suitable for the people, and there is a market for their lahour. The same might be the case in Tibagy, a fertile area of 20,000 square miles, the name of which is as yet unknown in the onter world, and is even in its own provinee little better than a terra incognita to the greater part of the inhabitants.*

Mr. Well's route lay through a region at almost the other extremity of the empire, in the Provinces of Bahia, Maranhão, and Para, and so affords us an opportunity of contrasting two widely separated parts of the country. The Rio Grande is one of the most important affluents of the San Franciseo-important not only for its size, but for the combination of navigable streams that flow into it. Long belts of manve-coloured water-lilies fringe the banks of the rivers, while above them rear a few graceful Caruahuba palms. This treethe Copernicia cerifera of botanists-is one we lave already (p. 132) noted some of the many uses of. In these districts it exists only in small quantities, but in the Provinces of Cearà and Rio Grande do Norte it grows uneultivated in great luxuriance. It resists the most severe and longest droughts, keeping always green and flomishing. The root possesses medieinal properties identieal with those of sarsaparilla. The strong light fibres extracted from the trunk take a high polish. The wood is used for props, joists, and otlor building purposes, as

[^55]well as for stakes, musical instruments, tubes, and pumps. The iuver rind of the young leaf when fresh is highly valued as a most nutritious food. In addition, the tree affords "wine" vinegar, a saccharine substance, and a great quantity of gum, not unlike sago, and possessing mueh the same properties and taste, which, in times of severe drought, has often been the only food of the poorer inhabitants of the provinces in whici the tree grows in greatest abondance. A kind of maizena-like ilour, and a whitish liguor like the "milk" contained in cocoa-nuts, are also extraeted from it. The soft filbous sulstance in the interior of the stalk, and that of the leaves, form an exeellent substitute for cork. The pulp of the fruit is agreable to the taste, and the kernel, which is very oily and emulsive, after being roasted and pounded, supplies one c" the many substitutes for coffee. The dried leaves are made into hats, mats, baskets, and brooms, and already a considerable trade is done with Europe in the "straw," which can be plaited into fine hats, some of which are sent back to Brazil, and probabier re-exported as the finest "Panama hats." Last of all, the candles used in the Northern Provinces are for the most part made of the wax extracted from the leaves, and which wax gives the palm its speeific mame of "wax-bearing." Indeed, the village of Boquerão is mostly built of the materials obtained from this valuable tree la the forests back from the river are found immense numbers of the caetetis, a speeies of peecary (Dicotyles, lubiatus and D. (orquatus), also the guarà, or red wolf' (Cunis cauplestris), the suenarana, or puma (Felis concolor), and many other wild animals, thongh in time, when the rich grazing lands of the country about get properly utilised, domestic eattle will dispute the ground with the fere ualure. The shallow lakes abound in ducks and other aquatie birds, while the land, only raised a few feet above the level of the river when at flood, is covered with the thin wiry grass called Capiat "yjeste,* which, however, affords but little mutriment to cattle. Here and there the thickets of Carnalhuba and Burity palms, with other trees, give a park-like appearance to the country. After leaving Santa Rita120 miles from Cidade da Barra do Rio Grande--a town of 1,400 people, the conntry changes much. No longer do the flat sandy plains of the lower river appear, but hilly country covered with dense forest is the prevailing appearance of both sides of the strean up which the canoe is being laboriously "poled." Mr. Wells describes these forests as not so magnificent as those in many parts of Brazil-those, for instance, of the Serra de Mantequeira, the stately Alurucaria (Brasiliensis) groves being much grander. Yet the great primeval woods of the Rio Preto, which flows into the San Franeisco, are invested with a degree of grambeur unknown in our latitudes. "The peculiar features," he writes, " of these forests are the larrigudo and the gamelleira. The barrigudo (Chorisia ventricosa) is a tree with a trouk growing sometimes to eighty or minety feet high, and then branching out into horizontal boughs; half-way it swells out to sometimes double the circumference of its lase. The gamelleira, a species of wild fig (Ficus dolioria), growing to an extraordinary height, is still more peculiar, for jutting out from its base are perfect buttresses, sometimes ten or twelve feet high, consolidating and giving support to the giant. A kind of 'cotton' is obtuined from the barrigudo, and canges are often made from the gamelleia, though it does not make the most durable kind." There is a peeuliar musty odour in these forests,

[^56]which is said to be exuded by a certain slrub, but is also the smell exhaled by snakes, which, unfortumately, are also mumerous, though not to the extent which popular aceounts would lead us to imagine. In Marel and April heavy rains fall in these parts. The rivers are then swollen to sizes far beyond their ordinary dimensions, while the more precipitous ones come rushing down in a flood that carries all before them. In this part of the river1,807 feet above the sea level-is the village of Formosa, a collection of sisty squalid huts picturesquely seattered amid a wealth of tropical vegetation. Trees and bushes grow into every unfrequented place, and in many places the weeds are so high in the "street" that the houses on the opposite side are effectually concealed from view by the tall herbage. The climate is warm and moist, and the inhabitants, ifter the rudest fashion, raise grool crops of maize, beans, riee, sugar-eane, castor-oil plant, and mandioea, which they send diown the river on rafts made of the dried stems of the Burity palm (Mfaritia rinusas) to Santa Rita and Cidale do Barra. At Sauta Maria, at the mouth of the Rio Saprio (Bign Prog River), the Iudian frontier commences, a fact which may be learued from seeing that the six or seven huts which compose this inkud hamlet are fortified in a primitiee way. The imhabitants have taken this preeantion, not without good reason, for Santa Maria has been the scene of many a savage Indian fight.

The Rio Sapium is a deep, sluggish stream, flowing through marshy land, but too narrow to be of any service as a navigable river. Along its course are magrificent belts of forest, or groves of the Burity palm; while low, undulating lands on each side extend from two to five miles back from the banks, covered with ground palms, small bushes, and thin, coarse, hard grass; in a word, such vegetation as may be familiarly seen on the Campos Geraes of Brazil (p. 161). "Sometimes," wemarks Mr. We?'s, " beyond these low lands the land suddenly rises up almost perpendicularly, and becones a vast arid table-land, but abounding in most kials of game found in Brazil, such as the poreo do matto, a true wild boar, rarely fund any.. where else, and not to be confounded with the eaetetú, or peceary (p. iit) ; deer of several kinds, the gallheiro and the campeira, the louck and doe of the Campos; and the stately sussuapara, the largest deer in Brazil, but whose flesh is not eatable. There is also the ounce, or jaguar, the suçuarama (puma), the black ounce, and the guara, and near the river we saw numerous tracks of eapivara (water log), paças (Cariu Paca), and tapirs in extraordinary number. Red anu bhe, red and gold, and purple maeaws, and green parrots centimanoly by us, making the hill-sides eebo with their discorlant sereeches." Mile after mile would zometimas be covered with the extraordinary looking Canella d'Elma ('ellozia), with its beantiful lily like flower. The air is as exhilarating as the atmoephere in any part of the world, and one conld almost imagine from the florid pieture that here at last is the long-sought-for elysium of the good traveller, But, alas! there are other sides to it. Yampire bats are many; and the uneonseions sleefrer may wake up in the morning feeling faint and miserable, and yet, until he examines his great toe or some other exposed part, be mable to understand in what way the life has been sucked ont of him. Pedestrians must also keep a sharp look out for the calbera de frade, a ground cactus, a foot in diameter, and only an ineh er so above the ground, yet covered with long spears, which cause a fearfnl wound in the foot of the umhappy person treading on them. But of all the terrors ly day or fiends by might along the Big Frog River, the ones most dreaded are the prevess do matto, the fieree wild pigs which haunt these primeval forests. They will not


[^57]wait to be attacked, but will track the traveller with that keen seent after blood which seems to rule in this fieree porker. Mr. Wells' men were very exeited over this question when they saw the ground in one place furrowed and rooted up in all directions by the pig. They turned away, but "old Antonio, one of our men, said they would be sure to follow us. Accordingly we mate every preparation by placing the paek-saddles and the baggage in the form of a hollow square, making a breastwork three or four feet high. Those who had hammocks slung them high up in the adjoining trees. The men were too sure of a visit to sleep for a long time, tired as they were. However, late at night we posted two sentinels, and turned in. An hour or so before daylight I was awakened by the alarm of nies. The men who had no hammoeks hurriedly scrambled in behind the luggage. In an instint the pigs were on us by hundreds, gaasling their tecth in a most unpleasant manner, making a sound like the breaking of thousands of hard, dry sticks, while the stench from their bodies was most revolting. As every man had cartridges ready and arms loaded, they soon reeeived a volley, and retreated, but charged again immediately. The men behind the baggage had to fight with their long knives. Myself and the men in the hammocks were all safe, and made every one of our shots tell on the black secthing mass of bodies. At first it was an anxions time, but the pigs gradually drew off to a more respectful distance, and so we remained perfeetly quiet. At daybreak they went away. Our baggage, though, had suffered terribly. The raw hide covering of the pack-saddles was slit as though by an adze, aud one of the men was badly hurt in the wrist. We found seven pigs dead, and five ladly wounded, but numbers of the wounded must have got away. These animals are true wild boars, with long, black, projecting tusks, and thiek, black bristles on their backs." The Barity palm generally indicates morass or streams, while the capine agresie grass, unless fired, always presents this sombre burnt-up appearance, which detraets greatly from the other fresh aspect of the landscape. Here an observation of Mr. Wells may be recorded. All the mountain ranges of Brazil ruming north and south are considerably steeper on the western side than on the eastern, a fact which is apparent in the part of the comntry we are now describing. Brazil abounds in game; among others. the perdie, or Brazilian partridge, which is found in great numbers. Wood, river, and swamp abound. Henee the traveller, who may have laid down a bee-line for himself on the map, finds that before reaching his goal, he has to make many and many a weary detour in crder to avoid these obstacles in his lonely mareh. Not far from the isolated little hamlet of 1ispirito Santo-as lonely a place as the world knows of-is a fine waterfall. The Rio Somninhe, when it joins the Rio Preto of Goyaz, becomes the Rio do Somno (the River of Slecp). The waterfall of eighty feet in one drop is just at its junction. The morass contains immense numbers of the water-boas, which sometimes attain the length of forty feet, and it is even nffirmed of sixty feet. The River of Sleep is one of the most pieturesque streams in Brazil. The upper part flows between perpendienlar walls of parti-coloured rock, often a hundred or more feet in height. Eudless cascades llow from the heights above; palms, ferns, and flowers take possession of every erack and erevice, and shelter the rock, giving the lofty banks a most charming appearance. Here also may be seen the great nests of the shupe bee, sometimes twenty feet long. The honey and wax which they produee in great abnadance suppiy an artiele of commeree to some of the Indians or other semi-civilised inhabitants, who collect them. The lower part of the
river is not so pieturesque. The banks are lower and more regular, and eluthed with forests of great luxuriance. Here may be lound many different kinds of palm, and even the wild banana. Innumerable monkeys, marmosets, ant-eaters (p. 133), as well as macaws, parrots, and other birds make the forests lively. Insect life, of course, swarms; and tapirs, capivaras, and alligators can be seen on every sumny bank. The whole region from San Prancisco to the Toeantins is singularly free from mosquitoes and the other insect pests, including even the carapatos, or ticks, the greatest misery which travellers in Brazil have to experience. The seenery on the Upper Toeantins is not so fine. The forests are insignificant, without grandeur or beanty, and become all the less remarkable when compared with the broad, long reaches of the river, sometimes extending for eight or ten miles a-head, making the horizon of sly and water. On the Tocantins human habitations begin to be common. Every few miles are a hat and its small attached plantation. But the inhabitants of this portion of Dom Pedro's empire add little to its development. They do not live; they vegetate. They increase certainly, as do the trees and the animals around them; but they raise only what they want to maintain life, in this respect being again analogous to the forest denizens around them. But they are surly, proud, and naturally independent. Nature is here so generous to her children that their trilling necessaries of life ean be obtained almost without labour. Fish can be got from the river in almost any quantity, game swarms in the forest, and a few roots of mandioca put into the ground supply the cultivator in due time with bread at even less cost than he obtains his meat. The tanned hides of deer furnish him with the limited wardrobe he requires, while the exuberant forest all around him contains the raw material for the every other want of these listless, dreaming children of the sun. River dopphins (Iuia Boliviensis) are often seen in the Toeantins. They rise to the surface, give a deep sough, then "blow," and send a clond of vapour into the air. It is curious to see an animal belonging to an order which we associate so closely with the sea found so far inland. Yet on the 'Tocantins and the other great rivers of Ameriea in these latitudes there exists an irregular kind of whale fiskery, thongh in this part of the river it is not pursued, probably owing to the faet that the oil which ean be obtained in considerable quantity from the animal's blubber cannot be utilised or sold. Away from the river, in the territory of the wild Indians, ean be seen fautastie ranges of hills, in which gold is said to exist. But as the Ishmaelites have hitherto been sufliciently skilful in phlebotomy to awe the explorers, the world knows inut little of the water-shed of the Tocantins and Araguaya, and its mineral riches. The "Indos" have a wholesome suspicion in these parts of the "Christianos," as, with charitable laxity they style the Brazilians. Carolina was onee an Indian village, and though it ran' : as a eidade or eity, it is but an insignificant place of 1,500 inhabitants; the honses are lmut of adobe and sun-dried briek, and tiled or thatehed. Of course, like all Brazilian, and it may be added Spanish towns, it has a square and a whitewashed church. Carolina, nevertheless, has one distinguishing feature whieh, to its eredit, ought to be related. Usually these out-of-theway towns are in a continual ferment from polities, jealonsy, or intrigue. Carolina, on the contrary, seems a quiet place, where the inhalitants live in kindiness and gord-feeling with each other. Prom here the country may be crossed to Maranhão on the sea. Part of the country lies over the open Campos Geraes. But the horses and mules are in this part of the world poer and searce ; and, accordingly, though every province has its own way of paeking a
mule, the muleteers are more careless and less expert the further north we go. Yet even in this section of Brazil skilful horsemen aboundi. It is a favourite amusement of the horsemen of Carolina to dash alongside a runaway bullock, seize him by the tail, and turn the astonished animal upside down. Soon, however, the country gets hilly, and by-and-by the hilly land beeomes more regular, thinly covered with grass and a few trees, or sometimes cousists of long flats of saudy waste, or loggy places concealed with matted grass and bush, through which horses can be taken with great difficulty. By the side of the streams grow an immense number of palms, the names and effigies of which will no doubt be found in Von Martin's great work on that order of plants, or in the lesser treatise of Wallace. Another tree, which Mr. Wells denotes as growing in this section, seems likely to be of economic value. It is peculiar to the province of Maranliño, where it is locally termed "merim." It is a large, wide-spreading tree, with ragged, rough bark. "Upon gashing the tree a volatile, inflam-


Botuct do indian of midizil. mable fluid oozes out, at first smelling like kerozene, but, on exposure to the air, its odour changes to the delicate perfume of violets. I am told that it yields an immense quantity of oil, but is not applied to any use. The tree is but little known, even where it grows." More hills, more rivers, moro "Campos Geraes," might be the stereotyped entries in a journal of travel over this country. Gold and eopper exist in the hills, the latter, indeed, in great quantities, though, like many of the other mineral riches of Brazil, it is still minworked. The rural population are, as a rule, low and ignorant, and sometimes-though Liat in Brazil is rare-ceven unhospitable to a wayfarer who seeks the shelter of their houses. The Rio Grajahu is another of the streams in this section. The Villa do Chapada is a thriving settlement on the east side of the river. Here a brisk trade is done with the surrounding country, the traders taking down the river raw hides, and returning with cotton goods, salt, and hardware. The Anambeios and other tribes of Indians also frequent this village for trade and curiosity. The tribe named live on the Tocantins, below the River Araguaya. They are very pale in complexion, and are known as the White Indians, though the Indians in the immediate neighbourhood-such as Guajajaras and Grammellas-are of the usual aboriginal type: short in stature, very deep-chested, and powerfully built, light brown in colour, and in physiognomy decidedly of the Mongolian type. The upper part of the Grajahu is high and rocky, densely eovered with firs, and with here and there a ferv civilised inhabitants. But lower down all hahitations cease, and the country then becomes a virgin forest, stretching in one all but unbroken expanse to the Tocantins and Para. But though the forest distriet is without civilised denizens, it is not mpeopled. In it reside many tribes of Indians, some hostile, and others friendly to the whites, and engaged by them in the laborious work of poling boats up the river to Chapada. The highlands passed, the course of the stream is through a vast extent of lowland and morass. Here by day the heat is terrifie, and the
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sand-flies, in dense clouds, soon bite the wretched voyager into a condition bordering on fever or madness, and at night mosquitoes in myriads effectually kill sleep with their stinging and humming, which are almost as bad. The forests on either side of the river are almost different from the thick jungle higher up. "For a little way from the river the ground, covered deep.


SCENE IN THE CAMPOS OF SOLTRERN BRAZIL,
with the decaying leaves of centuries, is perfectly free from bush; and I could sometimes see so far into the forest that the far-off trees looked blue with the distance; but overhead branches and foliage were interlaced together in one entangled mass of creeper and vine. From the branches the creepers dropped their air-roots like ropes, to take fresh life from the ground. These forests abound in jố, or quail, whose melancholy notes alone
disturb the solemn silence of the woods. . . . The banks of the river are very picturesque, bordered as they are by all the beanties and wealth of a tropicul vegetation-pulins of several kinuls, tree-ferns, and graceful bamboos, and trees festooned in flowers, among which gambolled several varieties of monkeys and marmosets. Macaws, parrots, toucans, and other birds flashed their gaudy plumage everywhere; long-neeked white heroms and other aquatie birds flew a-head, almost skimming the water." Eleetric eels—the tremé-tremé, peixe d’anguia, or poraqué, as it is variously named by the Brazilians-deter bathers from venturing into the water, while the prevalence, in immense shoals, of the ferocious piranhas (Serra Sulmo) effectually restrain the ardour of those who might not be terrified by even an electric shoek. Entering the river, the voyager, on his way to the sea, soon arrives at the town or villa of Vietoria, a place of some 2,000 inhabitants, earrying on a considerable trade with the const and interior. After the Pinare flows into it, the Mearim widens out to a mile or more, the bed of the river being at every low tide exposed in broal, black flats on either side of the deeper eurrent in the middle. Such seenery is melaneholy in the extreme. The sun is burning, and the mosquitoes are fieree and very many. The muddy banks, topped by the weird roots of mangroves, are here and there enlivened by flocks of red flamingoes, which disport themselves there; or the loathsome-looking alligators which open a sensual eye on the plump biped who skims past them, half asleep, on their slimy beds.*

The immense waterways of Brazil promise a great future for her should her destinies be gnided by $u$ firm and judicious a hand as that which now holds the helm of state. This it would be easy to prove did space permit, as the literature of Brazilian hydrography is now getting extensive. Equally would it be a pleasant task to pourtrey at greater length the exuberant natural history of the great empire of the Amazonian Valley. But both have been done quite as extensively as our pages spare room for. And shonld the reader desire to learn more, there are in the English language, accessible to him, the writings of Bates, Wallace, Wiekham, Chandler, Church, Mulhall, and a seore of other equally trustworthy explorers.

## CHAPTER XI.

## Brazit: Men and Manners.

Tire Brazilians have many of the faults, most of the vices, and all of the virtues of the race from whom they spring. In addition, they have a few weaknesses peeculiarly of native origin, and some good traits of charaeter due to a freer government and a more extended view of the potentialities of life than are possible to the dwellers in the pleasant but cireumseribed Lusitanian Peninsula. Like most nations who have been cursed with slavery, they are visited with the miseries of the system. They are easily led astray by flattery, vain, often weak, effeminate, and luxurious. The climate firnishing food with so little labour, enables them to live at ease, but at the same time, if need be, at little expense, and with great simplicity if

[^58] flashed ls flew uia, or tho the ctually ing the plaee After - being in tho quitoes 'es, are or the is past
they are so minded. They are as a rule generous, hospitable, and charitable; but combine with these estimable qualities a tendency to cherish grudges, and to wnit an opportunity of tuking vengeance. Homicides, with this motive, are numerous, especially in the central and northern provinees, where education and refinement are very backward; though crimes against property ure fewer than in most European countries. Religious life is dull. The wonen are often devotees, but exeept among the lower classes, the men are very lux, and indeed often sceptical. As in Mexico and most other Spanish-Americmen countries, there is a great antipathy to " take holy orders." Indeed, in Brazil, such is the scarcity of candidates, that priests have to be imported from Italy. The priests are, however, very intolerant. In 1870 the Jesnits were expelled from the province of Pernambico, and of late years the attempts on the part of the clergy to crush freemasonry by excommunicatiug the members of the craft have caused mueh ill blood, and may eventually lemd to even serious changes in the relation of Church and State. Brazil already possesses a literature. In epic poetry it is rich, but dramatists aro few, and historians and publicists not many, though, as they number anong them Couttinho, Lisboa, and Pita, they wis of considerable eminence. The taste for musie is very generally spread in Brazil. There is an Italian theatre in Rio de Janeiro, but the compositions hitherto published by native artists are not of any great note. The fine arts are nurtured by an academy in the eapital, and by State sulsidies employed in sending the most promising students to study their profession in Italy. There is a perfectly free press, conducted for the most part with great good taste, aud some ability. In Rio thero were, in 1877, six daily papers, and throughout the empire altogether 200. Political feeling often runs high, but always stops short at attempts at revolution. This may be owing to the popularity of the Emperor, though it is also in a great measure due to the system of government, which, though allowing perfect freedom, is hedged round with many cheeks, the absence of which has permitted the neighbouring states to every now and again rush to destruction, without its being the business of any one to clap on the drag, or, indeed, in the power of any one to prevent the machine from going to ruin. There is a nobility in Brazil, but it only dates from 1822-the year of the deelaration of independenee-and pussesses no special privileges, either social or legislative. Titles, moreover, can only be held for one generation, the rank dying with the father, unless the son can establish a claim to the distinction on the same grounds as those for which his father obtained it. 'These are the Brazilian "peers." But in reality there are a great many others who enjoy a sort of brevet rank. These are gentlemen who are deseended from noble familics in Portugal who have been long in the country's service, or are very wealthy. Such claims to be admitted into the aristocracy are readily admitted by "society." There are three degrees of nobility-marquis, count, and baron, in addition to the title of knight (moços fidalgos), obtained by admission into any one of the six orders of chivalry founded or adopted by the present Emperor and his father. As usual with such "distinctions," a cross is very easily obtained, and the Emperor's numerous visits to Europe have resulted in that of the "rose" dangling from the button-holes of some very obscure representatives of the equestrian rank, of even Brazil. The result is, that the aristocracy, being continually reeruited from the democraey, and liable at any time to return to the rank from which they sprang, do not consider themselves a superior race of beings, exeept in so far that they are for the most part the pick of the population of the country. The officials are polite,



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and easily accessible, and the "upper" classes requiring some higher qualification than the not uncommon ono of possessing a father, are as a rule men of good morals, great merit, and sometimes even of learning. The people are rather fond of show, the latest Parisian fashions being as familiar in the streets and ball-rooms of Rio and Bahia as in London or Berlin. The ladies are also much addicted to jewellery, though at home they dress in very plain attire while pursuing their household occupation, or to use Mr. Scully's phrase, "while employed industriously in some small domestic coonomy." They are often very attractive in physique, but like most women of hot climates, their bloom is usually gone by the time they are thirty. At that critical age, they also usually develop a tendency to corpulence, which, however, does not detract from their beauty in the eyes of their appreciative countrymen. The Brazilian ladies are rarely learned, their taste for polite letters and science being almost nil, but in music of the Italian school they are frequently experts. Mr. Scully describes the Brazilian gentleman as temperate and frugal, but indolent to the last degree. Espere um pouco (wait a little), cámautia (to-morrow), and puciencia (patience), are words very frequently heard in Dom Pedro's empire. "Some yield themselves up to the charms of literature and science, but most of the upper class are content with a monotonous daily round of existence, made up of many naps during the day, gapes over the balconies in the afternoon, and a réuution in the evening, with an occasional visit to the opera. In truth, the warm and mild climate predisposes to indolenee, and the youth, after having passed through the ordinary course of a college education, or having loitered a few years with a private tutor, enters a publie office, or sinking into domestie insignificance, fritters away his life in indolence, or in the cudless frivolities of strect perambulation. In fact, the great want in Brazil consists in the nut-door games, the debating clubs, the cheap concerts, the leetures, the periodicals, and the various applianees which the European at home has at his command, to strengthen and improve his mind and body, and whieh would be of incalculable service to the youth of both sexes in this delicious but somewhat enervating climate. And thus it is that the situation of the young Englishmen, sent out as clerks to the many English mereantile houses in Brazil, lecome most deplorable. Placed by their employers in a house with one or two negroes to attend them, and rigidly shat out from the society of their compatriots by that snobbishness of English intercourse abroad (nowhere greater than in Brazil), which makes the tinker of kettles dread contaminating association with the tinker of saucepans, these, in many cases gentlemanly young men, too often take refuge from the dreary monotony of their existence, and from their feelings of isolation in a foreign land, in all the exeitement of immorality and dissipation." The rural Brazilian is proud, and poor because he is unnecessarily proud. The Portuguese settlers are, on the contrary, generally industrious, and reap in competence or in improved position in life the reward of their exertions. To strangers they are courteous and even kind, and amongst themselves very sociable, though excessively ceremonious, a ceremony whieh, moreover, exists among all classes. One negro when meeting another will politely raise his hat-or what remains of it -with a Salveo Deos, or Deos the dê bonas dias, followed by a string of conventional inquiries regarding their mutual fin ilies and relatives, and will part with an equally ostentatious show of politeness. When speaking to each other, Brazilians remain uncovered until desired to put their hats on, which again gives an opportunity for a little polite bye-play. When a stranger enters a room everybody rises and salutes him. The master of the house goes to the it, and ashions . The e while aployed ysique, thirty. er, does razilian but in razilian o (wait in Dom t most f many vening, oses to college fice, or endless games, oliances nd and elicious shmen, lorable. ly shut abroad inating ren, too ings of e rural ; on the reward mselves ong all s of it nquiries is show 1 to put When a to the
door to greet him and usher $h \cdot m \mathrm{in}$, and when going away the same ceremony is obscrved, only the order of going is reversed. The Aldeos and bowing commence at the top of the stairs : are renewed a few steps down; re-commenced still lower, and perforce are finished at the door, when the guest turns round and salutes his friend with a few more bows and polite nothings. If familiar friends meet, an embrace of a most emphatic description is added. The ladies are scarcely so ardent in their demonstrations at meeting and parting, but on all occasions they kiss profusely on both cheeks, these buccal osculations being perhaps not more


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Judasaical than the labial ones familiar in female intercourse nearer nome. Like all the Latin, and, indeed, Teutonic races, the Brazilians are very particular in giving every person their proper title. Every person in the ranks of the aristocracy, that is, every fidalgo and individual holding office under the Government, must be styled vossa excellencia-"your Excellency." Bishops are similarly addressed. A simple priest is called "your Reverence ;" and all persons of respectability rossa senhoria. Ladies without distinction of rank are styled in conversation vossa cxcellencia. In writing, the excellencia order of individuals are addressed illustrissimo e excellentissimo senhor; or, if a lady, illustrissima e excellentissima senhora donna. All others are entitled to receive on the envelopes of their letters illustrissimo senhor. "In writing to a superior, etiquette requires you to sign your name at the very bottom of the page, and the superscription is generally placed at right angles with that on

English letters. The name is preceded by the illnstrissimo e excellentissimo senhor, or in accordance with the rank, and is followed by three et ceterus; and if occupying any high office, it is customary to put under the above dignissimu, with his official title. If sent by hand the name of the writer is placed at the bottom."*
lashionable Rio betakes itself during the hot months to Petropolis, a German colony in the Organ Mountains, where are the Emperor's summer palace (p. 128) and the residences of many of the wealthier classes. The wooded mountains, the wealth of tropical vegetation, and other natural beauties, by all accounts, make this Brazilian retreat, 2,300 feet above the sea, an earthly paradise. Beautiful palm-lined paths lead from the town in every direction, until they are lost, as all things are in these countries, in the primeval forest, with its close undergrowth of ferns, or its showers of orchids, suspended from the branches of the great trees, while overhead streams the sun through a veil of green. But the exigencies of civilisation are marring this beautiful scene. Everywhere the industrious colonists are firing the bush so as to clear the land for maize and other crops; very necessary, no doubt, but still almost heartbreaking to the naturalist, who loves tall palms and bamboos, and is not pecuniarily interested in Indian corn. But no effort of man is ever likely to alter materially the beauties of the panorama from the summit of the Alto do Imperador, with the bay of Rio as its boundary, or the loveliness of the falls of Itamaritz, in the heart of the Serra da Estrella, tumbling amid banks of ferns, ipomeas, and passion flowers. Another of their summer retreats is Thersesopolis, near the highest peak of the Organ Mountains. A pleasant ride is this spot from Petropolis, along mountain-paths-though among great auracarias, or marshy jungles, clusters of aloes, with cimdelabra-like spikes of flowers, masses of Bruguansia suavolens, or "daturas," as Mr. Hinchliff calls them, overhanging the banks of the little rivers, and "filkng the air with the sweetness of their long white $\mathrm{b}_{\mathrm{i}} \cdot \mathrm{ls}$," castor-oil trees, and sprealing wild figs, even though the road is steep and in many places even difficult for the inexperienced traveller. Travelling in this part of Brazil is, as yet, when not undertaken on the river, accomplished by means of horses, mules, or stage coaches, though in some of the more out-of-the-way distriets the lady, lorne on a litter and attended by her slaves, is not an uncommon sight. Communication with the interior will ever lee the standing trouble of Brazil. For instance, according to a report furnished to the Foreign Office in 1575, the United States had one mile of riilway to every 56 square miles; Canada, one to every 148; Chili, one to every 298; Costa Riea, one to every 317 ; Honduras, one to every 638; the Argentine Confederation, one to every 955 ; Uruguay, one to every 1,290; Peru, one to cvery 1,040; Paraguay, one to every 2,334; Mexico, one to every 3,435; while Brazil had only one mile of railway to every 7,573 square miles of territory. Invention and adaptation are not Brazilian characteristics, and, in the rural districts especiplly, the agriculturists are too much devoted to the ordinary daily life of their class to spare much time to the effort to grasp what is recondite and profound. They have not had the opportunity of observing the progress of other countries, and their faith being therefore weak, they hesitate at investing their meins in what they look upon as merely speculative. The Government is, in such matters, not much more enlightened. It could do much for agriculture by establishing central schools, building cheap railways, and founding rural banks. But they never dream of doing so-or perhaps they only dream, for beyond remitting the duty on agricultural machinery, little or

[^59]nothing has been done to foster what may always, in a comntry like Brazil, be the backbone of the empi e. Export duty on the principal articles of Brazilian production is cleven per cent., while his ther "burdens" are of such a nature, and leviel in such a way, as to effectually crush the life out of the little farmer who has any greater ambition than simply to vegetate on little farms.

The Indians, though playing their part in the troubles of Brazil, are, as yet, ouly important from their numerical position. Scattered through the empire are many tribes :still in their pristine freedom. In addition, there are others half civilised, and a vast number in the vicinity of the back country torvns on the great rivers who are as much Portuguese as Indians, owing to the intermarriage of the settlers with their ancestors. To the first class belong those living in the forests and campos ( p . 161) of the interior, whilst to the latter may ibe assigned the tribes dwelling in the maritime provinces, where they have become amalgamuted 'with the settled population. They have all the American aboriginal characteristics. In build they are usually muscular, with well-shaped hands and feet, dark snaky eyes, copper-coloured .skin, and long, straight hair, unless, as now and then happens, as probably is the case with those figured on p. 152, there is a strain of African blood. Their subdivisions are almost endless, but they arc believed to be all sprung from one stock-the Tupi-Guarani. Most of them now :speak the Lingoa-Gera, a language adopted by the Jesuit missionaries from that of the Tupenambaras, one of the large lastern tribes-this tongue or jargon serving, on a wider scale, : somewhat the same use as the Chinook jargon of North-West America, or the Lingua Franca of the Mediterranean. The Botucudos (p. 160), who wander through the forests between the Rio Doce and the Rio Pardu, are one of the ferw tribes who have thoroughly eschewed the -white man and his ways, and, thercfore, strictly deserve the name of Gentios, which the Brazilians apply to the alorigines who do not, ostensibly at least, profess civilistition. The Mamelucos are half-breeds, who have at different times made raids on the south province: but - even they have abandoned most of their old characteristics. The Negroes we have already sife'sen -of. In addition to the pure-blooded blacks there are many mulattoes, of all shades, wion call themselves Braziieros, and, according to Mr. Johnston, from wh m I derive these particulars, :are very littlo inferior in eapacity, physical strength, or intelligence to the pure race of Portuguese. Many of the Negroes-especially those not born in Brazil—are pervadad with a strong desire to return to Africa, a movement which is already making itself felt in a scarcity - of labour in the vicinity of Rio and the provinees south of it, a searcity which will no doubt increase as time goes on.

The Brazilians are in the habit of boasting of their resources-and they have a right to do : so-but if, instead of talking so much of their dormant wealth they would set about developing it, the world would be more inclined to listen to them. Large sums have been sunk in attempts.almost always unsuccessful-in establishing colonies of foreign labourers in different parts of the ompire.* These failures were owing, first, to the unsuitability of the districts :selceted for settlement, to the swindling promises of the touts employed to seduce unwary people out, to the mistake of planting these colonics at a distance from the consuming markets, to the absence of communication and transportation, Indian troubles, and to the
*The facts regarding these colonies I take from a report ly Mr. Austen: "Consular Reports," 1870, pp. $\mathbf{7 6 0 - 9 4}$.
delay in the survey and settlement of the lands, which have in many instances prevented the colonists from obtaining their title-deeds to this day. There were other reasous which prevailed up to 1861 . These were, that if the immigrants were not Roman Catholics they had no guarantee for their matrimonial contraets, and for the rights aecruing therefrom to the ir offspring. If not a Catholie, the colonist, though born a Brazilian, could not become a deputy : to become so he had to aljure the creed of his parents. Some of these ru'onies are private ones, others are imperial, while a few are established by the aid of the different provinces, but as yet none of the schemes ean be recommended. On the contrary, it would be only encouraging failure to counsel an inexperienced Englishman to settle in the rural districts of Brazil. The Portuguese, owing to their identity in religion, language, laws, and habits, and the similarity of race with the Brazilians, have been much more successful as settlers shan the other Europeans. In Rio alone there are about 70,000 Portuguese. They do not confine themselves to agriculture, to which they are averse, but launch out into all branches of commerce, many of them making considerable fortunes, with which they return to the mother country, greatly to its benefit, morally and materially. The commercial operations with Portugal are to a great extent in the hands of the Brazilan Portrguese. "In communieation," writes Mr. Austen, " with Lisbon, Oporto, and all the principal towns and villages in Portugal, they have banks and agencies on a seale exceeded only by the money-order offices in Great Britain and ber colonies, and with their persevering industry, clannish proelivities, and frugal babits, they are the only foreigners who seem to amass fortunes in Brazil." Probably until the extinction of slave labour there will be little room for free men. The free man consumes twice what the slave does, and produces less. Aceordingly, to establish an equilibrium between production and consumption, the free man must produce nearly double the quality, or the value of his production must be equivalent to that of two slaves. Even when the servile element is elininated from Brazil, the white man will have little chance of competing with the ex-slave in the cultivation of some parts of the country. The conelusion of Mr. Aeting-Consul Austen is, that Brazil requires population ; nature is on so overwhelming a seale, that it dominates man, instead of man reducing it to his multifarious purposes and advantages. Such a population can only be obtained "by the introduction of eivilised, industrious, intelligent, and physically endowed races, who will intermarry with the natives, and multiply and improve the race." It is, however, just possible that even to "develop the natural greatness of Brazil," "a civilised, indastrious, intelligent, and physically endowed race" might not be inelined to make suel a sacrifice !

## CHAPTER XII.

## The Reptblic of Bolivia.

Jammed as it were between Brazil on the north and east, the River Plate Republics on thesouth, and Peru on the west, lies the Republic of Bolivia. Rudely triangular in shape, with its centre on the watershed between the Atlantic and the Pacifie, drained on one side by the
revented $s$ which hey had from to uld not ;ome of by the d. $\mathrm{O}_{\mathrm{n}}$ lishman atity in ve been e about bey are ;iderable morally in the Lisbon, ks and and ber ts, they ntil the onsumes ilibrium quality, n when ance of nclusion o overtifarious duction ermarry ble that elligent, be, with by the


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great tributaries of the Amazon and the Rio de la Plata, and on the other by the shallow half-hearted streams that fail to find their way to the sea from the western slopes of the Andes, it has scarcely any communication with the ocean, to whose waters it contributes so bounteously. On the east and south, Brazil, Uruguay, and the Argentine Republic bar the way to the Atlantic; and on the west, Peru and Chili occupy the seaboard, with the exception of a short break between La Chimba Bay and the Rio de Loa, which is apportioned to Bolivia. Yet this slip of sea-const is of scarcely any value to the republic of the Andes, for it lossesses not a port worthy of the name, and the streams which run through the district west of the mountains are miserable representatives of the noble rivers which, towards the north, unite to swell the flood of the Madeira, and in time the Amazon, and in the south in the shape of the Pilcomayo, Vermejo, and a score of other rivers, to give strength to the Parana, and its outlet the lio de Plata, nearly 2,000 miles to the south.

## The Geography of Bolivia.

With the centre of the country almost on the crest of the Andes or its spurs, Bolivia is essentially a mountainons country, though towards the east it gradually gets flatter and flatter until it shares in the plains of Southern Brazil, Uruguay, and Argentina. Gergraphically, Bolivia is really a portion of Brazil, or of the River Plate valley, to which vice-royalty indeed, under the Spanish Government, it belongs. The department of Atacama on the Pacific, is, however, topographically a part of both Chili and Peru. It is an arid tract, full of volcanoes, and so badly watered, that the mules conveying freight from the little port of Cobija to the interior often suffer much from thirst. Hence, though great privileges are accorded to it in order to encourage merchants to import goods by this route, most of them prefer to use the ports of Peru rather than incur the hardships of this sterile region. As a natural result, it is almost without inhabitants, except in the spots where the guano and nitrate of soda deposits are found; and of late years the discovery of the rich silver mines of Caracoles lave attracted a considerable population to that part of the region. These mines are from 10,000 to 15,000 feet above the level of the sea, and heree in a region comparatively healthy. The western department of Bolivia is an extensive platean, with numerous valleys, the climate and products of which vary according to the elevation, though as a rule they are more remarkable for their mineral riches than for their vegetable products, a e sarse grass on which the llamas feed being the most marked feature in that department. The lower elevation to the east is the great grain-producing region of Bolivia, and probably owing to the fact of mining not being attended to, woollen and cotton manufactories have attained some degree of perfection. From thence eastward the country gets lower and lower, its climate changing with every degree of longitude, until in the lowlands a tropical temperature and tropical products appear. In Chuquisaca, a part of which lies in the elevated regions, there are found all the products of temperate regions, as well as rice and vines, while cattle and horses, which cannot live in the Upper Andes, flourish; and as the tributaries of the Paraguay are approached, forests of fine timber cover great portions of this departmeiti and the neighbouring one of Tarija. The lowlands of the east yield tropical crops and produe's, and interspersed with much pasture-land, possess considerable forests containing valuable
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olivia is d flatter phically, indes. , Paeific, , full of f Cobija accorded refer to natural itrate of Caracoles re from healthy. eys, the re more n which levation fact of egree of hanging tropical here are tle and of the elit and roduc's, valuable
timber, though as a rule the climate is damp, hot, and, when there are swamps, very unhealthy.

The central mountain barrier of Bolivia is usually described as the Andes. In reality, however, there are four distinct ranges forming its highest lands, more or less separated from each other by valleys and phiteaux. It is in the Cordillera Real, or central system, not in the Low Andes, that the highest peaks are found. These, high up amid eternal iee and snow, are Illimani, 19,926; * and Sorata, 24, 800 ; though in the Andes the voleano of Sahama is reported to be 23,000 , and in the other ranges there aro peaks from 15,000 to 17,000 feet high, the snow-line in the highlands of Bolivia being between 16,000 to 18,000 feet above the sea-level. These high plains, or basins, have a water system of their own. The rivers never reach the ocean, terminating in lakes, in swamps, or in arid, glistening salt-fields, the rapid evaporation, as happens in the similar case of the Central North American lakes in Utah and Nevada, balaneing the supply of water flowing into them from the melting snows of the surrounding mountains. The highest of these table-lands-the highest in the world except that of Tibet-is the one in which Lake Titicaca (pp. 181, 185, \&c.), and its feeder the Rio Desaguadero, are situated. Here is also one of the chief seats of the present Bolivian people, just as in former and happier days it was the home of the ancient Inca race. Titicaca, one of the largest islands in the lake, a familiar tradition assigns as the home of the Manco Capac, and his wife Manco Cello Huaco, t the founder of the ancient Inca empire, and thence the spot from where spread the light and civilisation which, until the Spanish trampled on this New World culture, illumined the surrounding regions of Bolivia, Peruvia, and Ecuador. This subject we may have by-and-by to discuss in outline. Meantime, it is enough to say that I agree with the greatest of all the modern European authorities on the Inca, or Ynea empire, Mr. Clements Markham, in thinking that there is no proof for such a theory, and that in all likelihood they were the aboriginal inhabitants of the country round Cuzco, in Peru. Their empire was a wide one, the Inca regions alone extending from the water partings between the basin of the Huallaga and Ucayali at Cerro Paseo, to that between the basins of the Ucayali and Lake Titicaea, at the basin of the former peak of Veleañota, a distance of 380 miles. This country comprises every variety of climate, allowing of the products of every zone to be collected on one side, while the difficulties which nature has thrown in the way only succeeded in stimulating the mind of this ancient eivilised race, as it usually does, with greater vigour in the effort to overcome them. But the Inca empire was a much wider one than that comprised within the boundaries of one tribe. Six aboriginal nations united to give it strength-the Incas, the Canas, the Quichuas, the Claneas, the Huancas, and the Ruancas. These people, taking them as one, inbalited a strip of mountain and coast-line, bounded on the east by the forest-covered plains of the Amazonian basin, and extending north and south upwards of 1,500 miles, from $2^{\circ} \mathrm{N}$. to about $20^{\circ} \mathrm{S}$., with an average breadth between the sea-shore and the Amazonian basins of 400 miles. "This vast track," writes Mr. Markham, "comprises every variety of climate, and contains within its limits most prolific tropical forests, valleys with the climate of Italy, a coast region resembling Sind, or Egypt,

[^60]temperate hill-sides and platemix, bleak and chilling pasture-lands, and lofty peaks and ridges within the limits of eternal snow. On one mountain-side the cye may embrace at a single glance, sugar-cane and bananas under cultivation; in the lowest zone, waving fields of maize ; a little higher up, shaded by tall trees, orehards of tropical fruits, stretehes of wheat and barley, steep slopes clothed with potatoes and quinoa, bleak pastures where llamas and alpacas aro browsing, and rocky pinnacles of snow." * Titieaca, or Chuquito, is-the Inea myth aside-a remarkable enough lake. It is 12,000 feet above the sea, has a maximum depth of 700 feet, and an area of $3, \approx 20$ square miles-that is, equal to fourtcen

view on the hio blanco, bolivia.
lakes of Geneva (Johnston). The borders are surrounded by a rieh and fertile country, which supports numerous towns, and were communication better, might be still more thoroughly populated. Some of the Bolivian scenery, especially that in the vieinity of this lake, we have engraved on pp. 172, 173, 177, 181, 184, and 185. These views will give a better idea of the places pietured than any mere verbal descriptions. Bolivia, though naturally a part of the empire of the Incas, and therefore, properly speaking, a country of the Pacific slope, is yet, geographically, a part of the Atlantic region, and for all the good its inlet from the Pacifie, through the desert of Atacama, does for it, it might as well possess no seakoard. From the Atlantic, Bolivia must always receive its supplies.
*"On tho Geographical Positions of tho Tribes forming the Empire of tho Yncas." (Journal of the Zaryal Geographical Society, Vol. XLI., pp. 281-338), and Map (Ibid., Vol. XLII., p. 513), with references. e at a fields ches of llamas is-the has a ourteen


Hitherto, however, the feasibility of opening up navigation from the laraguay to Eastern Bolivia has fallen through from reasons not diflicult to imagine. The Amazons lave in liko manner, owing to the eighteen rapids of the River Madeira, forming a barricr of 230 miles, not yet been made practicalle, though the question of constructing a railway around them has been often mooted, and cven got as far as the inevitable loan. The Purus, another important navigable tributary of the Amazon, has been proposed to be utilised. Chandler explored it for

vIEW OP tIAHUANACC, NEAR LAKB TITICACA, BOLIVIA.
1,886 miles, and it may be said to be navigable in light draught steamers as far as Curiemaha, a little stream 1,648 miles from the Amazon. Its branches will probably add 800 miles more of navigable water to the parent river. The Aquiry, which enters the $\mathbf{P}$, 1,104 miles from the Amazon, is reported to be a river as wide, but not so deep, as the $\overline{\mathrm{P}}$ urûs.*

The roads in Bolivia are merely mule or llama tracks. Once the Incas made fine highways, but through carelessness, greed, or laziness, they have been allowed to fall into disrepair, until, at the present time, the road which connects Suere, Santa Cruz,

[^61]Mojos, and Chicuitos with the plains of Beni and Madeira, is about the only one worthy of tho name, that from Potosi to Jujuy, in the Argentine Republic, being a remarkably poor work of art. Railroads have only begun to be built. There is a small line from the Bay of Antofagasta, on the Pacific, to the nitrate of soda deposits of Salar del Carmen. This it is proposed to extend. Another connecte La Paz with Aygacha on Lake Titicaca. At present, Bolivia chiefly communicates with the world by way of the Perovian port of Mollendo and Arequipa, from which runs a railway to Lako Titicaca; this lake is again crossed to the Bolivian side by means of steamers.

## Climate.

In a country of such varied elevations, it necessarily follows that the climates are many. Indeed, the traveller descending from the highest elevations to the lowest, passes from the Arctic region to the tropics in the space of a few hours, and witnesses the growth of all products, from those of Greenland, to those which popular imagination more especially connects with the latitudes we are now in. The elevations above 11,000 feet are known as the Puna, and the Puna (or Cordillera) brava. They are bleak lands, thinly inhabited, and, indeed, on their highest points, are ulmost solely left to vicuña, llama, alpaca, viseacha, chinchilla, and other animals, in addition to the condor and various birds of prey. The vegetation consists of mosses and hardy grass. Lower down-on the Puna-the climate is milder. Here men can live and grow potatoes, barley, and coarse grass, on which Hocks of sheep, llamas, and vicuñas feed. Yet, notwithstanding the chilly air, in the elevated plains several species of cactus grow, one of them, the Cactus Perurianns, attaining a height of from 20 to 40 fect. Still lower down, in the temperate region known as Cabesera de Valle-between 9,000 and 11,000 feet above the sea-wheat, maize, oranges, vines, and similar crops flourish, while still lower-in the Talle, or Merlio Innga-the crops of a mild, sub-tropical climate appear. Finally, in the lunga, which is the name applied to all the country below 5,000 feet of elevation, the fruits, and other products of the tropics, grow in the greatest luxuriance. Travelling in the highest elevations is dangerous, not only from the cold blasts of air which sweep over them, but from the sudden storms which often overwhelm the exposed wayfarer. In the lower regions, however, the climate is delightful. There are rarely night frosts, and to the delighted eye of the dweller, either in the Punas or in the lowest regions, a perpetual spring seems to prevail in the Valle and the Higher Yunga. No rain-or next to none-falls on the western side of the Andes; hence a great portion of tho country is a desert. But in Eastern Bolivia rain falls with more or less regularity, often accompanied by thunderstorms, and, in the higher regions, hail and snow take its place. The climate of Potosi is very irregular. "During the uight and early part of the morning it is piercingly cold: in the forenoon it resembles our fine weather in March. In the afternoon the rays of the sun, in so pure and attenuated an atmosphere, are very powerful, and scorchingly hot; while towards evening the air usually becomes mild and serene. Strangers, on first arriving in these higher plains, are usually affected with difficulty of breathing, owing to the extreme rarity of the atmosphere; they are likewise sufferers
from dysentery, whieh, however, for the most part soon disappears, and, in general, the highlands are by no means unhealthy." So much for Mr. Keith Johnston. However, mueh doubt has of late been cast upon the supposed effect of rarefied air in causing difficulty in breathing, surveyors having pitched their camps on the Himulayas at mueh higher elevations without experiencing any of the supposed iuconveniences of the situation.* It is possible, therefore, that fatigue has mueh to do with the exhaustion, more especially as balloonists, at quite as great beights, have not complained of any difficulty in breathing. Saussure was the first to originate this statement, but siuce the day of the first climber of Mont Blane we have learned a good deal, and accordingly those athletie people whose pride it is to climb mountains are rather inelined to rebel against the old conventional idens about rarefied atmosphere, difficult breathing, and the rest of it. Captain Musters, when travelling within the zone of the Cordillera Brava, was often struek with the resemblance of the surrounding scenery to the lofty plateaux of Patagonia. The same tufted grass and coarse shrubs formed the vegetation, whilst, to make the resemblance still stronger, guanacos, pumas, ostriches, and armadillos were observed: it only wanted the smoke from the Indian hunting fires to complete the illusion, which was powerfully aided by the cutting blasts which forcibly recalled tine cold of the Southern Pampas. Travelling in Peru is thus, if varied and interesting, very trying to the constitution. The alternation from hot to cold brings on certain fever, and the almost as great torments of mosquitoes, vinchucas, sand-flies, \&c. The eutting wind from the iey peaks of the Andes chills him in the morning, whilo at midday he is seorched by the sun, which hardly permits of ordimry clothing being worn, though, if he is not careful, before a few hours go by, he may be frozen by a cold ranging near zero, or overtaken by a heavy snow shower. He is fortunate if, on arriving at a miserable posthouse, he can get a few eggs and a dish of "Chupe" to warm his starved body and allay the cravings of an appetite whetted by the keen mountain air. It is, indeed, often diffienit to obtain provisions, and they must be taken without consulting the owners, who can be paid for them afterwards-yet, probably, for the very reason that property is so very expesed, highway robbery is very rare, and even trains of silver will mareh over the mountains without escort, and yet be unmolested. "There are," writes Captain Musters, "many roads in Bolivia where are changes from 'valley,' or tropical, to frigid, certainly, in one day's march: it is sufficient to cite the rond from Oruro, ria Arque, to Capinota, as an instance. Leaving Oruro, and traversing the intermediate plain, the road passes over the High Cordillera of Tapacari at an elevation of 14,500 feet, and gradually descends, winding down the sides of a long ravine. Little by little, shrubs, at first stunted then larger, grow by the side of the mule track, then a pateh of barley or potatoes for a mile or tw- ; then high, flowering slirubs, eelbo, and other trees appear; until, at length, on turning a coner, Arque is seen in the distance, nestling amongst orange, fig, and other trees, surrounded by maize plantations. A league or two farther down the same ravine, onnanas and other tropical trees come in sight, and, should the traveller follow the

[^62]course of the stream, a couple of hours' ride will bring him to an intensely tropical valley, where sugar-cane, \&c., are cultivated." Travel still farther across the desert of Ataeama, and another climate still will be experienced. Here the temperature is also changeable. At the nitrate works of Las Salinas-owing, perhaps, to the very dry atmosphere, and to the ground being covered with salts, which cause a very rapid radiation of the heat at night-the difference in the temperature within a few bours is very remarkable. For instance, a minimum shade temperature of $7^{\circ}$ Fahr. has been registered at seven a.m., in the winter, and at eleven o'clock in the same day, $98^{\circ}$ in the shade, being a rise of $91^{\circ}$ in four hours. In summer, the shade-temperature ranges between $40^{\circ}$ at night, and $130^{\circ}$ in the day. Frequently the temperature of the ground at one p.m. is $145^{\circ}$ Fahr. The air is so dry, that a piece of thick note-paper, if folded and pressed with a paper knife, will break in two when folded out. Yet there are evidenees to show that violent rainstorms bave taken plaee, and that the rain, having nothing to absorb it, has rushed off in terrific torrents down the steep slopes of the mountains, rolling boulders, weighing many tons, in their course. It is now impossible to say where these storms have oceurred, and how often, though the probabilities are that they are very local occurrences, and do not visit this arid country oftener than once in several hundred years. One such storm happened near Pau de Azuear, in Chili, about thirty years ago, when the torrent was so great as to sweep away some heaps of copper ore, a blacksmith's forge, some carts, and one woman. Although the storm only lasted a few hours, and the place was some seven miles from the sea, there was never a trace of the victimsanimate or inanimate-found. It is, however, scareely aceurate to say-as is generally done-that no rain falls in this desert of Ataeama. Near the coast there are usually two or three slight showers during the winter, but seldom enough to wet the surface of the ground. The wind is almost invariably a gentle sea-breeze by day, and a landbreeze by night. There are trices of old lakes in this section, now only dry valleys. South of the River Loa there is no fresh water, so that all the water required both for men and animals has to be distilled from the sea, or from water obtained in wells. Even that used in the locomotive engines of the railway company is distilled from the sea in Antofagasta, and carried all the way-eighty miles-to Las Salinas for the double journey. Until the discovery of the nitrate deposits, some ten years ago, this part of the desert, the town of Cobija, now officially called Puerto de la Mar excepted, was unpeopled.* To return to the higher elevation, the "Altaplanicie," or table-land, and the Punas. In the higher elevations suimmpi, or snowblindness, is frequent, and in some cases has proved fatal to the belated traveller. In the Indian villages of the Punas an infectious fever-the "febre amarilla"-decimates the population, while coughs and other chest diseases are common on the Puma, and even far down to the Valle and Yunga distriets. It cannot, however, be denied-all wholesome scepticism on the subject notwithstanding -that many people at these elevations suffer from giddiness and vomiting. Indeed, so familiar is this sickness to the inhabitants, that they know it as the "Puna," or Zoroche, and have a well-established treatment for it. When attacked, they at onee cease walking ; if on foot, sit down, if on horse or mulebaek, dismount. The Indians usually

- Harding: Journal of the Royal Gcographical Society, Vol. XLVII. (1877), pp. 250-253.
y tropical desert of re is also very dry radiation $s$ is very registered he shade, s between round at if folded there are nothing ountains, ay where are very red years. go, when cksmith's ours, and rietims generally a usually urface of a landvalleys. red both in wells. rom the e double part of ed, was nd, and in some unas an d other districts. tanding leed, so Zoroche, cease usually

iblins of inca monuments in the environs of tiahuanace, south of lake titicaca, bolivia.
recommend the sick man to eat snow, lut the smelling of ammonia or garlic is the usual remedy adopted. Cases have been known to prove fatal through persons not stopping wher they felt the symptoms. Not only is man liable to the sickness, but mules, and other beasts of burden, suffer severely at times, and many die. It is said that those ascending from the eastern side are less subject to the sickness, probably owing to the fact that the change from low to high elevations is less rapid than on the western slope. In the higher parts of Bolivia-for instance near Sucre-Captain Musters, from whose notes we have derived some of the preceding information, describes the seasons as being very marked. Rain falls during the summer months, namely, October, November, January, February, and March, whilst, during the remainder, dry, clear weather prevails, accompanied by strong wiuds in the months of August and September. At the breakup of the seasons heavy thunderstorms occur, and not a year passes without persons or houses being struck by lightning. This division of the seasons does not, however, apply to the Santa Cruz de la Sierra, and the lowlands, through which the Beni and other tributaries of the Amazon find their way. Here rain generally falls capriciously all the year round.*


## History.

Having now gained some general ideas of Bolivia and its climate, let us, before proceeding further, glance briefly at its history. The history of the Bolivian Republic is, in its carliest period, that of Peru. Indeed, at one time it was called Upper Peru, and is yet, though shut off from the Pacific by want of the water-ways which unite it with the Atlantic, the highlands of that country. The tale of the Incas and their wrongsso far as it is necessary to understand the development of Peru-will be considered by-and-by. The abominable injustice to which the native population was subjected by the mita-the foreed labour on farms, in factories, and in mines-the tribute-the iniquitous working of the law of repartamiento-and other wrongs, at last culminated in a revolt of the native population under the Inca Tupac Amaric. This was in 1780-81. After spreading terror and destruction throughout the country-we are at present speaking solely of that portion afterwards known as Bolivia-the "rebels" were defeated, and their leader put to death with the most hideous tortures. He was the last of the Incas, or, at least, the last who dared to assert the liberties of his people. The natives never afterwards attempted insurrection, but doggedly endured the evils which they could not avert. They lost spirit, and even a desire for better things, and when their old masters rose, and in their turn attempted to shake off the yoke of the Spaniards, the Indians looked apathetically on, careless who won, believing that in the victor in any case they would have a master. At first the war of independence was carried on by Bolivia in connection with Peru and the River Plate provinces. This warfare went on-with few intervals-from 1809 to 1825, during which period success was sometimes with the Spaniards, at other times with the "patriots" more frequently, however, with the former, who were better equipped and disciplined than the rebel colonists. It would be a wearisome task to

[^63]is the is not mules, those to the restern from easons ember, evails, breakins or wever, ly all
relate all the ups and downs of the civil war. . Suffice it to say, that in 1824 a great battle was fought at Ayacucho, in Peru, and immediately after General Sucre marched with his army into Upper Peru. The result was a universal rising of the "patriots," and the capture, or capitulation, of the chief towns. Even the Royalist troops revolted, and joined the rebels to such an extent, that, in August, 1825, Upper Peru was declared an independent repubtic, and soon after, in honour of the Liberator, Bolivar, received the name it now bears. Its subsequent history has not been more favourable tban that of the other Spanish repuiblics. Civil war has been almost continoous. Rarely has a President been allowed to serve the full term for which he was elected, and, indeed, of late years the form of election has not been gone through, the favourite for the time being of the soldiery being declared President, and kept in office by the same means through which he was installed-that is to say, until his masters choose to replace him by another hern of the hour. Their intestine troubles bave been varied by foreign "wars" with Chili and Peru, from which the republic emerged crippled and disorganised for civil government. Moreover, Glory, though a pretty bauble, is rather unnutritious as an article of diet: it does not do for a regular meal. Accordingly, of late years, the Bolivians bave been repenting of their evil ways, and show signs of growing tired of their everlasting playing at soldiers, revolutionisers, and war. The result is that civilian government has taken the place of the military despotism under which they have lived for so long. There can, however, not be a great deal of hope for a country with an army of $2,000 \mathrm{men}$, "led" by 1,020 officers. These dogs of war must be fed, a necessity evinced by the fact that the present President, General Hilarion Daza, succeeded Dr. Frias-the inaugurator of 'he new order of things-by the summary process of election by bayonet. The capital . 3 been about as shifting as the Frecutive. At one time it was La Paz; then it was. transferred to the fortified town of Oruro, and at present it is at Sucre, that is to say, when the Government is not forced, for safety's sake, $t \boldsymbol{t}$ flee to some more secure quarters.

## The Gonernment and the People.

The exact area of Bolivia is very uncertain, its boundaries in the direction of Brazil beingstill somewhat unsettled. As near as need be it may be given at 536,200 English square miles, though in some statistical works its compass is estimated at very much more. There are nine departments-La Paz de Ayacucho, Potosi, Oruro, Sucre (or Chuquisaca), Cochabamba, Beni, Santa Cruz de la Sierra, Tarija, and Atacama, with a population estimated at 2,526,000, the first-mentioned department being the most thickly populated, the latter the thinnest, as might be expected. Two-thirds of the population live in the country districts, and the remaining third in the cities or towns. Two new provinces-Malgareja and Mexilloneswere decreed in 1866 and 1867, but at present they seem in a most embryonic condition, for we bave been unable to gain any intelligence of their position and prospects. The wild Indians of Peru have or n variously estimated as numbering from 21,000 to 700,000 , the one estimate being as ouviously too small as the other is too large. Perhaps 250,000 would be nearer the mark. In the valleys there is a large admixture of negro blood among the Indians, while in the temperate regions the Quichuas, and in the frigid Punas.
the Aimaras predominate. As a general rule it may be laid down that the first inhabit the south of the republic, and the latter the north. The Atacamenos-who speak a now fast-dying language-inhabit the Atacama desert. The Indians occupy themselves greatly as muleteers in the carrying trade between Potosi and Calama, or in driving llama trains, and may also be met with in the desert crossing to the sea with loads of various kinds. In some parts of this region so great are the quantities of mules which pass along, and so arid is the climate, that the track is covered with bones, and appropriately known as Sepulturas, or "the Tombs." For several miles, we are told by a traveller, the path is bordered with bones of mules, donkeys, and horses that had died where they had fallen. The animals were principally eargo mules which were badly fed, and had to work very hard indeed. So searee is provender, that cach animal's nightly ration of dried lucern or barley costs about $2 \frac{1}{2}$ dollars, or ten shillings. Captain Musters describes the Quichuas and Aimaras as having many habits in common. They are both fanatical and superstitious, wear ponchos-loose blanket capes-and coarse woollen clothes, and mastieate the coca leaf in order to gain strength, or, at least, a temporary stimulus. "In all the highest points of the passes, and wherever a murder has been committed, heaps of stones called 'apachetas'a word derived from the ancient goddess, Pachac Camac-are placed, and each Indian who passes spits out his juice of coca leaf, and adds another stone, as a sort of offering to the deity or spirit. The two races differ in language and disposition: the Quichua is a humble, civil, if not ser ile, individual, who drinks his chicha, and beats his wife, in peace and quietness, but the Aimaras are more independent, insolent, and bloodthirsty; and these latter are much addieted to the use of ardent spirits. Whilst on this subject, it might be worth while io mention that in no other country did I witness so much drunkenness among the lower classes, both Indians and lalf-breeds, especially the latter. I rarely arrived at a small town, or mine, without finding the greater part of the population the worse for liquor. The Indians are small and slender in physique, but are active, and capable of enduring great fatigue, especially in long journeys. They are, when sober, a hard-working race, and cither bury their earniugs, or spend them in religious feasts, which are always an excuse for a debauch. The Quichua Indians, not situated on the highways, I found to be very eivil and hospitable, especially when nade aware that I was a foreigner. They, as well as the Aimaras, are divided into two classes, Hacienda, or Estate Indians, who rent land, and are subject to work a certain number of days for private persons of their landlords, and Communidades, or Indians in communities, who have to pay tribute to the Government from whom they hold their land, which they work in common. These Indians appoint their own alcalde, or magistrate, who regulates the partition of crops, or other questions. In some of these communities there are still some curious customs, and I believe that the Quipos, or language of knots, is still understood. For instance, the Indians in the community situated near Puna, province of Potosi, when a young couple are married, all subscribe something to assist the newlywedded couple. For the greater part of the cultivation in Bolivia irrigation is necessary, and the Indians are very dexterous in constructing acequias, or aqueducts, for this purpose. They are very reticent regarding their traditions, also as to showing mines, althongh undoubtedly possessed of the secret of many rich mineral deposits." To these remarks
inhabit a now greatly trains, kinds. g , and own as le path fallen. k very cern or las and s, wear h order of the tas' Indian ffering hua is ife, in irsty ; ibject, much latter. ilation , and er, a easts, n the I was a, or s for who they ulates still adere of wlysary, pose. ugh arks
of Captain Musters we may add that in addition to the native tribes there are, in Bolivia, a good many Guaranis from the Paraguay region, who have crossed the mountains and settled in the plains. They are said to be-especially the women-more iudustrious than either the Quiehuas and Aimaras (or Inea Indians), and seareely so much given to strong waters. There are also in Eastern Bolivia many nomadie or wild Indians belonging to various tribes, who make raiding excursions into the Argentine Republic, plundering


OLD INDIAN TOMBS ON THE ISLAND OF SURICA, LAKE TITICACA, BOLIVIA.
villages of eattle, women, or any other portable property. They hold in great contempt the civilised Indians, who in their turn share all the white man's antipathy for their savage brethren. The stationary Indians live chiefly on maize and potatoes, and prepare their own intoxicating drink (chicha) from the grain of the former plant. They also breed goats, llamas, and sheep, and farm in a rude fashion, albeit some of them are wealthy, while many others could be so, had they any ambition beyond supplying the needs of the hour. In 1866 a fever raged among the native population, and some parts of the Altaplanicie have not yet recovered from it. Strangely enough, none except the Indians were attacked by it, though it is well known that the aborigines used every possible means in their power to convey
the contagion to the whites. As in most South American countries there is also a considerable number of Zambos, mulattoes, and cholos, or descendants of the Spaniards and Inca Indians. These latter in many respects resemble their fathers, and occupy themselves in carpentering, tailoring, silver-smithing, trade, and mining. They all are, as a rule, turbulent, immoral, drunken, and improvident, but without them Peru would never have attained its independence. The Indians, like the rest of the people, are for the most part ostensibly Roman Catholics. Education has not, however, made much advance among them, nor is the Republic yet thoroughly permeated with the necessity of this. Still, since the country has attained its independence, many of the rich revenues of the convents and other religious establishments have been diverted for the purposes of the higher education. At Sucre has been long a university, and in Potosi-as becomes so great a mining centre-there is an excellent school of mineralogy. The chief cities are situated on the eastern Cordillera. There are in the south-Sucre (p. 169), Potosi, Cinti, Tupiza, and Tarija; in the north-La Paz, Cochabamba, and Oruro. Santa Cruz de la Sierra is more to the east in the Lowlands. Sucre, the capital, was named after General Sucre, who did so much to gain for Bolivia its independence, thongh it commonly retains its ancient name of Chmquisaca, signifying, in the Aimara language, "the gold bridge." The town owes, if not its origin, at least a great measure of its prosperity, to the fact that the miners of Potosi use it as a place of refuge during the winter, when Potosi becomes insupportably cold. In Sucre are the residences of the Archbishop, the Supreme Court of Justice, and the President, and the place of meeting of Congress, and in Sucre is the great religious sight of Bolivia, namely, "Nuestra Señora de Guadalupe," in other words, an image of the Virgin Mary, gaudy with gold, pearls, and precious stones, valued at two million of dollars. The cathedral also contains some fine plate, and some good religious paintings, though whether they are, as popularly affirmed, the work of Murillo, may be doubted. The Sucreanos are better mannered, more aristocratic in their ideas, better dressed, and speak purer Spanish than the people in any other part of the Republic, and, indeed, in Captain Musters' opinion, than in most of the South American towns. At balls the ladies of Sucre turn out in remarkably good taste, albeit most of them make their own dresses, as there are no milliners in the town. With the exception of two or three wealthy mine-owners, and the Government officials, the men are usually engaged in commerce. Foreigners, or descendants of foreigners-generally Frenchmen, Spaniards, or Basques-are among the richest merchants of the city. Amusements there are almost none. Now and then a theatrical performance takes place in an old church turned into a theatre, or a bull-baiting comes off in the Plaza, boarded round. When the President is in the capital the regimental bands play in the evenings, but so intermarried are the people, and so strict the rules of mourning, that the death of any leading member of "society" often puts an end to some proposed gaiety. The ladies pass much of their time in church, and the men in visiting, or playing an old-fashioned game of cards called rocambur or qualrilli. At the last bullbaiting before Captain Musters' visit, several half-breeds and Indians who had imbibed Dutch courage were gored to death "amidst the acclamations of the spectators." Altogether Sucre is neither a very moral nor a very refined city. It is a proverb throughout Bolivia that revolutions consist in Sucre " of shouting, and in other parts of shooting." Easter week
is the great time of the year for cock-fighting, drinking, playing fives, fighting with slings and stones, "and one or two other games." The climate is temperate, and being near the Valle, the market is well supplied with all kinds of fruits, as well as vegetables from the immediate neighbourhood. According to Ondarza there are in Sucre about 24,000 inhabitants. Potosi, fifty miles to the south, and situated at 4,200 feet greater elevation than the capital, is the most famous place in all Brazil. The very name has become synonymous with untold wealth, for in its cerro, or mountain, 15,977 feet above the sea, are, next to those of Guanaxuato, in Mexico, the greatest silver mines in the world. Silver is also found in a neighbouring mountain, but it is from the great cerro that it is chicfly dug, as it has been for three hundred years, an Indian having accidentally discovered the rich deposit in 1545. The mines now extend to within 125 feet of its summit, and are believed to be practically unexhaustible. Cortes estimated Potosi to have produced upwards of $£ 236,000,000$. The town, including the suburbs, is at present inhabited by a population of less than 23,000 , though in its palmy days it boasted to have contained within its walls 175,000 eager searchers after wealth. In the mountain are the openings of 5,000 mines, though most of them are now abandoned. From the latest accounts some twentytwo companies are working forty-seven mines, and bring to the surface about one million dollars worth of ore annually. Potosi has suffered, perhaps, more than any other town in Bolivia from civil war, and the suburbs are now a mere mass of ruins. The great reservoirs for supplying the citizens with water, and the stamping mills with power, still stand to attest the former greatness of Potosi. It is said that the works cost the Spaniards $3,000,000$ of dollars. The mint occupies an entire block of the city. Its timber was dragged by oxen from the far distant woods of Tucumanu, and the whole building cost in 1562 over a million of dollars. Yet this mint, worked by stinm power, is out of order, and the Government, though quite able to find funds to "equip and clothe a mob of soldiers who serve merely for theatrical show and for the intimidation of those who object to the present rules," has not, according to Musters, sufficiert funds to put it to rights. As a result Bolivia, which has mines of surpassing riches, has no good sterling coin within its boundaries.

Centi is a small town, chiefly remarkable for its vineyards, which supply the whole of the south of the Republic with wine. In Tupiza are rich vines, and in the vicinity of the latter fine tobacco plantations and profuse vegetation generally. Tarija ( $\mathbf{5 , 6 8 0}$ people) is chiefly known on account of the bones of extinct animals discovered near it. Both are closely connected by mercantile relations with the neighbouring Argentine Republic, on the pampas of which have been discovered those great accumulations of the bones of extinct animals which, in geologicel times, roamed over these plains. Santa Cruz de la Sierra is a town of about 10,000 people in the tropical part of Bolivia, and famous for its coffee, tobacco, sugar, and other products common to the hot climate which the neighbouring country enjoys. The political atmosphere is also tolerably warm, the Santa Crucians being addicted to revolution. The most thriving of the Bolivian towns are, however, situated in the northern part of the country. The population of La Paz consists of, according to the latest census, 76,372 souls, chiefly Indians and half-breeds of the Aimara race. Owing to its vicinity to Lake Titicaca and its communication with the outer world by the Puna and Mollendo Railway, and by steam
and coach, it is the city best known to foreigners, and the only one in Bolivia which is steadily advancing. Here resort the Cascarillos, or gatherers of Peruvian bark, in order tu sell the produce of their labours on the eastern slopes of the Cordilleras, and to La Paz come the Chilians and Peruvians suffering from consumption. Hence La Paz has several hotels, baths, and public walks. A still better climate is that of Cochabamba, a town of 41,000 people, lying at an elevation of 8,000 feet to the south-east of La Paz. The inhabitants are chiefly Quichian half-breeds, industrious, prosperous, but, contrary to the popular view of the antecedents of such people, neither honest nor sober. Oruro, a town of 8,000 people, is chiefly remarkable for its rich mines, though revolution and eivil war have so seriously

affected it that the place is now greatly fallen from its former prosperity. Trinidad, a town of 4,200 people, and Cobija, the free port already mentioned, are the only other towns in Bolivia worthy of the name. All the places at a greater elevation are more or less healthy, though in the very elevated positions, like Potosi, childean are generally born dead or blind, proving that such lofty homes are not suitable for the humau race.*

What the actual revenue and expenditure of Bolivia is we cannot tell for certain, as for several years past there have been no returns made. In 1573-i4, the Budget was calculated at $2,929,574$ bolovianos-a coin worth at present about 3s. 3d.-and the expenditure at 4,505,504 bolovianos. This leaves a large deficit. Export and import duties, a land-tax levied on the Indian population, and the proceeds of mines, the sale of guano, and other State property, constitute the source of revenue. There are, as in most Spanish-American countries, no direct taxes. Up to a comparatively recent period Bolivia kept out of debt. But at latest date she was reported owing $£ 3,400,000$, including $£ 1,700,000$ of the loan which she

[^64]contracted for building railways in 1871. The project of connecting the Republic with the Atlantic Ocean was, however, never carried out, though in its place the Republic has a plentiful crop of English lawsuits.

## Prodicts and Commerce.

A country with a surface so varied, and comprising so many climates, must possess an immense variety of products. Its mines claim the first place. Gold is found all throughout


VIEW OF A TEMPLE OF TIE SLE, ON TIE ISLAND OF TITICACA, BOLIVIA.
the Republic, chiefly mixed with antimony, silver, and other substances, and hence, owing to the difficulty and expense of extracting it by means of amalgamation with quicksilver, it is not collected to the extent which the renown of the diggings would seem to deserve. The lavaleros, or gold workings in the beds of the streams, yield, however, most of the gold collected in Bolivia. Those of Tipuani, where the metal is found in the shape of pepitas, or grains, at a depth of thirty or forty feet, embedded in a stratum of clay, were worked in the time of the Incas, whose tools are sometimes yet found embedded in the soil. In the province of Ayopaya are quartz veins, which, with lavaderos, yielded up to 1847, when they began to fail, $£ 8,000,000$, and many other parts of the country contain the precious metal in greater or less abundance, though some of the places where gold was dug in old times are now abandoned. Doubtless numerous mines will yet be discovered. For instance, 104
the great mountain of Illimani is believed to be rich in the metal, the shores of the lake at its base containing considerable quantities in a fine state of subdivision. In the seventeenth centiry there was found, not far from the city of La Paz, a nugget worth 11,200 dollhrs. It was believed to have been detached from the mountain by lightning, and is now-or was latelyin the Madrid Museum. Throughout all this region there must be enormous deposits of gold, judging not only from the quantities which have been extrieted since the conquest of the country by the Spaniards, but from the incredible amount which the Incas possessed in their treasuries, and lavished on the ornamentation of their houses, or even on the manufacture of the commonest domestic utensils. There is a tradition that the gold workers of the district of Caralza-probably one of the richest auriferous deposits in the world, and certainly on the Andes-" sent ' $a$ lump of gold' to the King of Spain the size and shape of a bullock's tongue, which was lnst at sea ; but in a little while they sent another piece the size of a bull's head, which arrived safely."* It is, however, the silver mines of Bolivia which have given that country its celebrity in the rest of the world, and has caused populous towns to be built at elevations and in situations where man would otherwise never have thought of taking up his residence. To this "argenli sacra"-or execreta-"fames" Potosi, whose riehes we have already spoken about, owes its existence. But the mines of Portugalete yield ore even richer than that of Potosi, though as yet the returns of silver has not been equal. Chichas, Laurani, Arque, Lipez, and Oruro, were all at one time famous mines, but though some of them arestill worked, most of them are either abandoned, or lie fallow for want of capital to work them, or from the scarcity of water, or the unproductive deserts in which they are situated. But the mines which have of late years attracted some attention are those of Caracoles, 120 . miles from the sea, and situated in the desert of Atacama. Thither in 1870 flocked adventurers from Chili, Peru, and even from the Atlantic and North Pacific countries. The mines were discovered by Don José Diaz Gana, one of the most indefatigable of Bolivian "prospectors." The deposits were lighted upon as these deposits often are, by that unsystematised chain of reasoning which for want of a better name we call chance. One of Gana's explorers, while climbing up the easy slope of a mountain, pulled up loose pieces of silver ore, on the places where are now the Merceditas and Deseada Mines, and followed on southward, picking them up in different directions, not knowing their true value, but thinking possibly that they might be of service. Others of the explorers had similar experiences. They had also found loose pieces of ore, and had made marks in the lumps with their knives. "Iwo of them immediately started to the coast to inform their patron. They had been to Diaz Gana what Sancho Mundo was to Columbus. The discovery was made, and that dry and solitary desert a short time after was the centre of an active population." These mines are from 1,000 to 1,500 . feet above the level of the sea, and among the richest may be reckoned Deseada, Merceditos, Flor del Desierto, Esperanza, San Jose, and Esmeralda. There are others promising, and a good many more, worthless. At one time, the stock of these mines was sold at fabulous prices. In Caracoles, fortunes of millions were made in a day, though thousands went thereenly to bury their means and their bones also in the vain search for the hidden treasures. $\dagger$

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It was latelyof gold, country pasuries, of the triet of on the ullock's a bull's e given built at up his ve have richer uarani, cm are. o work tuated. es, 120 . flocked - The "proatised lorers, on the icking. $t$ they found them what desert 1,500. ditos, and a pulous. there. res. $\dagger$

Copper is, however, only second to silver as a mineral product of Bolivia. From the mines of Ingavi, in the Province of La Paz, 15,000 to 20,000 cwt. of metal are annually extraeted. Tin, lead, quicksilver, coal, iron, precious stones-including hyacinth, opals, and diamondsm. $y$ be also enumerated as among the riches of the soil of Bolivia. Mining, notwithstanding its importance to the country, has of late years slowly fallen into decay. The disturled cendition of the country, giving no security for capital, and the listlessness and want of enterprise of the people, are the main causes of this. As a consequence, mines which, under good hands might be valuable property, lie fallow, and others are inefficiently worked, the method of reducing the ore being everywhere throughout Bolivia, in spite of European skill, mining schools, and long experience, inefficient and antiquated to the last degree.

The riches on the soil are not, perhaps, so valuable as those in it ; yet, the vegetable products of Bolivia are extremely rich and varied. Riee, oats, maize, barley, cotton, indigo, potatoes, cinchona bark, quinoa, and an endless variety of fruits and medieinal herbs may be mentioned among these. Quinoa is a plant whieh we have not yet met with. It is a species of goose foot (Chenopolliun Quinoa), mative to the Pacific slopes of the Andes, and largely cultivated, not only in Bolivia, but in Chili and Pern, for the sake of its seels, which are used as an article of food. A kind of gruel, seasoned with Chili pepper, is the form in which the meal is used, or the grains are roasted, boiled in water, and tho brown liquid, whieh is strained through, drunk like coffec. This is the carapulque, which is such a favourite dish with the ladies of Lima. Though probably a nutritions artiele of food, it cannot be deemed that to tastes not educated to the use of it, quinoa, no matter how prepared, is not a palatable dish. Cocoa we have already had oceasion more than onee to notice, as we travelled south from Mexico, but coca, or cuea, is a new plant. As soou as we get into Peru we shall again make its acquaintance, but meantime, in Bolivia, its use is forced upon our notice. E'rythrorylon coca (Plate XXVI. and p. 188) is a shrub six or cight feet high, belonging to the order Erythroxylucee, in appearance not unlike a black thorn bush, and is remarkable, owing to the fact of its thin, opaque, oval leaves being chewed by the Indians, and other inhabitants of the countries in which it is found, for the sake of the sustaining property which they undoubtedly possess. They were, indeed, used for this purpose in the time of the Incas, and of late years their celebrity has spread, not only through Peru, Chili, and Bolivia, but into Ecuador, Colombia, and to the banks of the Rio Negro, where it is known as "Spadic." A few years ago, owing to some experiments made on them in England, they were introduced into this country, and may now be commonly bought, either in the ordinary dried form, or in the various "preparations" in the druggists' shops. No Indian in Bolivia or Peru thinks of travelling without a little leathern bag of the dried leaves, and a gourd of powdered lime. The leaves are chewed four times a day, mixed, either with the pordered lime, or with the ashes of Cecropia, or quinoa. In moderation, they are said to produce a pleasant sensation, and an oblivion of care. Owing to its action on the nervous system, those using it can sustain their strength under great fatigue and through long journeys without any other food. With a chew of this wonderful leaf in his cheek, Dr. Richard Spruce, the celebrated botanist, declares that an Indian will go from two to three days without food, and even without any desire for sleep, and Tschudi, Markham, and others
tell equally wonderful tales of its effects on the constitution. It has been estimatel that $8,000,000$ of the human raee use this plant. The poct Cowley represents the Indian "Pachamna" as addressing Venus in these words:-
"Our l'uricocha first the Coca sent,
Eindowed with Leaves of wondrous Nourislment,
Whose Juice suce'd in, and to the Stomach taken,
Long IInnger, and long Labbour can sustain;
Front which our fuint and weary Bodies find
Moro Succour, more they cheer tho drooping Jind
Thun can your Bacchus and your Ceres join'd.
'Three Leaves' supply for six days' march, afford
The Quitoita, with this Provision stor'd.
Can pases the vust and cioudy. Andes ocr."

Its abuse is said to produce a gloomy sort of mania, and much the same effect as opium taken in excess. By-and-by the coea chewer

sibuo of the coca didant (Erythroxylon coca). beeomes a perfect slave to it, and loses care for anything save the gratilication of his passion for these " leaves of wondrous nourishment." It must, nevertheless, be allowed that those who reach the stage when eoca becomes absolutely dangerous are not many, for Dr . Archibald Smith, who passed many years in lern, never met with an instance in which the chewer was affected with mamia, or tremor of the limbs, while, notwithstauding the assertions of $\mathrm{P}_{\mathrm{ob}}^{\mathrm{p}} \mathrm{pig}$ and Lloyd, both Garcilasso de la Vegra--limself an Inea-Von Tschndi, and Markham, regard it as one of the best gifts of Nature to a race upon whom her gifts have not been prodigally lavished. The old Peruvians offered it as sacrifiee to their gods, and the silver miners to this day will throw it on the roek they are working in, under the belief that this all-potent herb will soften the vein of ore. It owes its properties to an alkaloid, called cocaine, highly poisonous, though identical in its physiologieal action with the milder prineiples of tea, coffee, and cocoa.* Bolivia has within its bounds some peculiar animals-specially suited for the conditions of the climate and life which prevail there. These are the guanaco, or huanaen (Auchenia Ituauaca), the llama (Auchenia Paco), the alpaca (Auchenia lama)—the sceond and third being probably only domesticated forms of the first-and the vicuina. The first three are allied to the Afriean camels, and seem peculiarly fitted for subsisting in desert plaees. Their feet

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the anNeal " Rodeo." or separation from the general flock of the lhamas,
are so formed as to enable them to climb rocky deelivities, and travel long distances through rugged, parched countries. These regions the guanaco frequents, and, when the country gets greener, more fertile, and, therefore, more suited to the ordinary animal life of the lower regions, the guanaco disappears, or becomes exceedingly scarce. When young, the flesh is a pleasant article of food. Their wool is woven into cloth, .nd their skins tanned form the leather from which shoes and harness are extensively made. There are said to be about three millions of llamas and their allies in the country, and of these fully one-third are employed as beasts of burden. Indeed, without them the traffic of Peru could not at present be carried on. The vicuña is a form of camel (Camelns vicugna), but is smaller than the preceding, though in its habits it greatly resembles them, but, as it is a timid, wild animal, cannot be employed as a beast of burden. The chinchilla (Chincilla lanigéra) is a mountain animal, hunted for the sake of its fine fur. There are also millions of sheep in the Bolivian highlands, while in the wooded parts of the country range jaguars, tapirs, and other animals of this latitude.

It is always difficult to get at the exact products exported by a country which, like Bolivia, is practically shut off from communication with the ocean. Silver, gold, copper, leather, wool of the vicuna, alpaca, and sheep, guano, nitrate of soda, coffee, cocoa, and cinchona bark are we know exported; but, as these articles pass through other countries, they are often c.edited to the ports from whence they are shipped. Thus, the metals are generally put among Peruvian exports, and the wool, bark, \&c., among those of the Argentine Confederation. The Indian fabries are used solely by themselves, while the cattle of the eastern regions of the Republic are used to feed the miners in the mountain towns. A considerable number of cattle are also imported from the Argentine Republic, and also some mules, though this traffic is now nothing to what it once was, when from 60,000 to 80,000 mules were every year sent from the plains of the Rio de la Plata to Upper and Lower Peru. But that was before the Declaration of Independence, and the subsequent decay of the mining and other industries of Bolivia. From the facts stated, as well as from the carelessness of the Government in never publishing any regular or accurate returns of their exports or imports, it is difficult to get at anything like approximate figures of the commerce of Bolivia. The export and import trade is in the hands of a few English and German houses, who accumulate steady fortunes, and, accordingly, are not much inelined to leave the ruts they have been travelling in for so many years. Owing to the unimportance of the port of Cobija-from the desert behind it-most of the Peruvian imports from the Pacific enter through what are called the Puertos Intermedios. These are the ports of Arica and Arequipa. By a convention entered into with Peru, the difficulty of collecting the import duties on the land frontier of either country was obviated by making commerce between the two countries perfectly free and unrestricted, on the condition of Peru paying Bolivia the sum of $£ 81,000$ per annum ( 40 a .000 dollars). Taking the year 1873 as a guide, Mr. Matthews calculates, from the "ustoms return of the port of Arica, that the trade of Bolivia is worth to the Peruvian Stioms about $£ 381,000$ per annum, or in other words that Peru gained by Bolivian commerce $£ 300,000$ at one port. It is, therefore, evident that any extension of commerce
distances ad, when ordinary ly scarce. ito cloth, ctensively in the without a form habits it yed as a inted for ighlands, imals of
which, er, gold, , cofiee, gh other hus, the ng those es, while nountain Republic, ien from Plata to and the ; stated, regular ng like in the rdingly, years. most of Puertos ed into $f$ either ly free annum , from ruvian olivian amerce
on the Pacific side cannot greatly benefit Bolivian finance, and that, accordingly, the Republic should concentrate her energies in opening up new trade routes from her eastern borders. The necessity of such a route is evident from the simple fact that on the frontier of Chuquisaca the owner of a magnificent harvest has been known to only reap a small portion of it, owing to the difliculty, and all but impossibility, of getting it to the sea. Such a road we have already indicated as existing, either down into the plaius of La Plata, or further along the Mamoré, Madeira, and Amazon. In 1575 the total exports of Bolivia were valued at about $£ 1,000,000$, and the imports at $£ 1,500,000$. In 1876 Bolivia sent to Great Britain $£ 413,119$ worth of goods, and received from us $£ 19 \$, 226$. The latter was a great advance over previous years, but the former was a falling off from the returns of most of the preceding years.

## Prospects of Bolivia.

A comntry with the resources of this Republie cannot surely be always destined to be in that stage of life which may be expressed by "great expectations." But before it does so, Bolivia requires many things which it has at present no great prospect of getting. It "agonises" for money, for it is in debt at home and abroad, and its income does not always meet its expenditure. It wants roads, it wants bridges and ferries of a less primitive type than that figured on p. 1S1, it wants railways, it wants capitalists, and above all it most earnestly requires men who have not a taste for revolutions and for soldiers' coats. It has splendid natural resources-every climate in the world-and mineral wealth such as no country save England or the United States possesses. Many parts of the ecuntry are not tilled, simply because there is no chance of getting the produce to a remunerative market. "At altitudes of 12,000 feet barley and potatoes are grown ; at 9,000 to 6,000 , cora, potatoes, pears, and all kinds of temperate fruits; 6,000 to 2,000 , coffee, cocon, coca, and plantains; and from 2,000 to the plains, cocoa, plantains, sugar-cane, maize, mandioc, arrowroot, yams, tobacco, and other tropical products. Few, indeed, are the countries that, in addition to the speculative allurement of mineral wealth, can holu forth such substantial inducements to the tiller of the soil; and there is, therefore, no doubt that the character of the people will improve when, through facilities of communication, remunerative work is afforded them, for Bolivians, whether of Indian or Spanish extraction, are very industrious, differing greatly, in this respect, from the inhabitants of many other countries of South America." Bad government has also something. to do with the neglect of their richness, which, in the passage I have quoted, Mr. Matthews gives so lueid a précis of. A country so overturned by revolution cannot be prosperous. Even the Indians, freed from the task of the mita, and no longer impressed, as they were in the days of the Spaniards to the extent of 100,000 per annum, to toil in the mines of Potosi, are too oppressed by the rapacious corregilores and tax-gatherers to cultivate a tithe of the land thronghout. There are inexhaustible silver mines, but no corn, and riches going to waste because there is neither enterprise nor money to make roads. Everybody wants a government office, and as the readiest way of attaining this end, become active enemies of whoever holds those desirable posts. More rapid modes of communication would change all this. We thus narrow the evils of Bolivia, and the cure for them, to the finest point, namely, the want of
roads, and the making of them. These wonderfal children of Old Spain are, however, always in the condition of what are styled in their own language bisoñosos-" people who want something." They are invariably in need of money or of money's worth, and unhappily for the givers, and perhaps also for the receivers, there are usually abundance of easy capitalists ready to present them with both. Yet they rarely receive gratitude, and assuredly they get nothing more substantial. The thanklessness with which all of

these South Ameriean Republics have treated their benefactors-native and foreign-is one of the lasting disgraces from which they will not soon get clear. During the lifetime of those who have toiled in their behalf, they revile and rel them! When dead they rear monuments to them. The patriot asks for bread to keep him alive; instead, he gets a stone to his memory.*

* Reck : Petermann's Gcographische Mittheilunges (1865-67) ; D'Orbigny : Descripcion geografica historica y estadristica de Bolivia (1845); Niacroy: "Voyage Across South America" (1870); Cortes: "Bolivia" (1875); Weddel: "Voyage dans le nord de la Bolivie" (1852), and various papers, Sc., of Forbes, Church, Johnston. Markham, aid oticers quoind.


GATHERING YEHILA-MATE ON THE HANKN OF THE PAHANA, PARAGLAY.

## CHAPTER XIII.

## The Repebacs of Pabagiay and Ubigeay.

Berore doubling Cape Horn and studying the const-lying regions of Chili and Pern, preparatory to voyaging among the islands of the Pacifie, we had hetter cross the Andes and descend into the low-lying plains along the Parana, Paragnay, Vermejo, Pileomayo, and other tributaries of the Rio de la Plata. Dovetailed as it were among the lower courses of the Parana lies the Republic of Paraguay, while lower down, bounded on its whole eastern border hy the sea, is the Argentine Confederation, while, slut in by the Uriguay river on the west, the Rio Grande do Sul Province of Brazil on the north, and the Rio de la Plata and the Atlantic on the south and west, is the little republic of Uroguay, which we have more than once referred to under the designation of Banda Oriental, which name it bore prior to separating from Brazil, and by which it is still often called.

## Paragiay.

Discovered by Sebastian Cabot in 15:0, Paragany was first colonised in 1535 by Pedro de Mendoza, who fommded the city of Asumcion, and constituted the neighbouring region a province of the Vieeroyalty of Peru. For long the Guarani Indians opposed the settlers; who were, for the most part, profligates of the worst type. In the sixteenth century the Jesuits wended their way thither, but could do nothing with the natives, owing to the evil example of the colonists. In the diseiples of Loyola these sons of Belial, however, soon found their masters. The Jesuits soon persuaded Government to constitute them the sole rulers, civil as well as religinus, of the provinces. The result was, the expulsion of all Europeans from the country who were at all caleulated to interfere with the proselytising projects of the Fathers. In a few years Paraguay was a colony modelled on the plan of a Christian primitive community. The Indians were, of course, soon reducel to the condition of mere children-tools indeed-in the hands of the Jesuits, though the pictures which contemporary writers have left, us of the country at that time reads like a doscription of a sub-tropieal Utopia. But troubles soon came upon the Paraguayans. In two years ( $1625-30$ ) it was calculated that 00,000 were sold in Rio de Janeiro market-place by the ruffians who made raid on the missions from the Brazilian provinees of Sino Paulo. Altogether it was ealculated that from the Jesuit establishmonts alone 100,000 "converted" Indians had perished or been carried off by their robber Paulistas. This was no longer possible. In the new Christian republie of the Jesuits the converts were far out of reach of the Mamelueo slave-hunters. Every mission was built on the same plan. A great plaza, or square, was in the centre; here was the ehurch, the college, the arsenal, stores, and workshops. Nor was the necessity of selfdefence neglected, for while during six days in the week the children sang through the village street the doetrines of the Chureh, every Monday the male inhabitants practised drill, infantry and eavalry, shooting at marks being especially cultivated as a useful exereise for brown Christians who might, in discharge of the first duty of a eitizen, have to kill white Pagans.

Every day the ceremonies of the Chureh were observed, and on high oceasions with a great deal of pomp. The industries of peace and even of fine arts were not neglected, for the wood carvings of the old misioneros still excite the wonder of a ruder generation. Printing presses wow established, and various works were issued in the Guarmi larguage-in a word, the Parenvan missions were institutions almost unique in the annals of sueh enterprises. In 17610 the population of the Jesuit "reluetions" was about 140,000 souls; but in 1801-thirty-four years after the jealousy of the Spanish Government had decreed the expulsion of the fathers-the survivors of the thirty missions did not number over 44,000 . Many of the converts bad taken to the woods; the plantations were abandoned; cattle, sheep, and horses were destroyed; "and," write the authors from whom I have derived much of my information regarding the modern condition of the River Plate Republics,* "the traveller cannot but view with regret the crumbling remains of the fine monuments that were onee the glory of a happy and progressive people under the Jesuit Republie" (p. 201). Forty years after the Jesuits were overthrown the Spaniards were expelled, and Paraguay then experienced how men will sometimes flee from the ills they

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Every here was of selfvillhge infantry or brown Pagans. ons with reglected, neration. nage-in ; of such 140,000 nent haid $t$ number ons werc ors from n of the ; remains ple under Spaniards aills they
have to others that they wot not of. Searcely lad the rule of Mis Most Catholic Majesty disappeared, tham for their sins, and the sins of their fathers, arose a terrible man, who for twenty-five years lashed the land with a seourge of iron. This was the famous Dr. José Gaspar Rodriguez Francia, the "Dietator of Paraguay." But tyrants have ever been the lot of that land. For no sooner was Francia dead, than-after a brief interval of anarelyhis nephew, Carlos Antonio Lopez, succeeded him, and on his death-bed transmitted his power to his son, Francisco Solano, better known as Marshal Lopez. There had by this time almost ceased to be any semblance of a Republic, or the slightest recognition of the rights of a free people to have a voice in the selection of their rulers. The Goverument was, to all intents and purposes, an absolute monarchy, and it soon became apparent that Lopez II., as he called himself, was prepared to make it so in name also. He aimed at being Emperor, and with his fatal ambition brought ruin on himself and on the country, which, in spite of their desprotic thrall, had made considerable progress, both under his grand-uncle, his father, and himself. But Lopez dreamed of conquering the neighbouring territories, and building up a realm for himself such as that which he had seen a not mueh more capable, and quite as unscrupulons, man carve out of a quondam Republie, to which, during his father's lifetime, he had been Paraguayan Ambassator. No one being prepared for such an audacious scheme, Lopez overran the Brazilian province of Matto Grosso almost without resistance, and in the next year (1865) invadel that of Rio Grande and the Argentine one of Corrientes with equal suecess. So sudden were his movements, that with the 00,000 diseiplined and well-cquipped troops which he had at command he might have ravaged half the continent, had the genemals with whom he trusted his enterprises possessed half the daring, or even a tithe of the energy, of their master. But they dilly-dallicd when they ought to have been active, and vented rodomontade, while their enemies were collecting troops, arms, and ships. To make a long tale short, the united forces of the Argentines, Uruguayans, and Brazilians, made an end of Lopez and his half-savage Paraguayans; but not until every footbreadth of the ground was contested by the wild soldiery of a more than half-mad despot. Hunger, nakedness, death, disease, want of arms, want of oflieers, and latterly want of men, broke the Paraguayan sword-arm. The men killed off, the women went forth to battle, and afforded the world a spectacle of the results of insensate ambition, tempered and ennobled by eourage, devotion, and patriotism, such as have been rarely witnessed in modern times. Lopez was a man without private and almost without public morality-a sensualist, who squandered the revenues of the State on unworthy objeets, and, judging him from his work, politically a ruler to whom no mame too severe can be applied. Yet in this swarthy despot there was something almost heroie; and amid all the misery and wrong he wrought, the world cannot withhold from him something of that reverenee which his comutrymen have aecorded him. After six years' resistance against overwhelming odds, the last remmant of the broken forces of Paraguay were overtaken in the mountains of the interior, and at Aquidaban, on the lst day of March, 1870, Franeiseo Loper ended on the field of battle his eareer and his erimes. Then his land was divided-re cictis; it was the old story. Unable to be said nay, Uruguay took what she elaimed, and Argentinat asserted what she considered her "rights" by annexing still more of Paraguay, leaving the rest to be a sort of Republic under the protectorate
of Brazil. Once a prominent name in their newspapers, we hear little now of the land of Lopez, unless when it is installing or mardering a President, negotiating an unhappy "loan," or presuming on the credulity of hungry Europe by holding out great inducements for English labourers to settle within its bounds. The "loans" met the fate of most of such affairs in South America, though they were not more unlucky to the lenders than any man gifted with the smallest of geographicul or political wisdom could have foretold. First, in 1871, a million was got in London; then, in 1872, two millions. They were to be devoted to building railways; but as the scrip when last heard tell of was ut

indian girl of paragitay.
25, it is, perbaps, unnecessary to say that the railways were never built. The bonds are now chiefly valuable as documentary evidenee of the strength of human credulity. The colony of "Lincolushire farmers" was even more hapless, for out of the 800 deluded people, 160 died of privation and hardship and two were murdered by the natives. The rest were, by the aid of the charitable, removed to Buenos Ayres, sadder and wiser men and women. The country is at present in a state of anarchy, which even the most sanguine must pronounce "hopeless." During the first year of President Jovellano's term of offiee there were three revolutions, the rebels shutting up the Governor in the capital. So utterly wearied and dispirited had the people become, that, as their only chance of obtaining order, they called in the Brazilian troops to aid them.

Since then, the Paraguayans can scarcely claim an independent position among the commonwealth of nations. They have murdered one President since that date, and installed
makket peotle of paraocay.
not a large extent of territory, one which, with a different race to vegetate on it and an entirely different set of rulers, might be made of some value to the world. Before its outraged neighbours had fixed its boundaries to suit themselves, Paraguay was estimated to embrace an area of 103,115 square miles; but nowadays its limits are so reduced that the most authoritative statistics estimate the area of the republic at 57,303 square miles. But even of
this amount only a comparatively small portion is inhabited. At the best of times the cultivated part never exceeded one-fifth of the country; und although, in 1857, a census uffected to state the population at $1,337,419$ inhabitants, it is believed by Mulhall und others that the real number was never over half a million, and that at present it hardly exceeds 100,000 . It is estimated that during the war 100,000 men alone perished; but the mortality of that fatal struggle included more than twice as many women and ehildren slaughtered in battle, und in the sacking of towns, or who died of exposure and sturvation in the woods. The survivors are said to have existed for months by devouring the bitter oranges growing wild in the forests.* The Cordilleras biseet tho country, the eastern half being almost uninhabited, and it is drained by four rivers, which fall into the Upper Parana. The climate is warm, but, as a rule, very healthy in the upper grounds. The sea-breczes, as might be expected in a country the nearest point of which lies 500 miles from the Atlantic and 900 from the Pacific, do not reach it; but, on the other hand, the climate is affeeted by the north and south winds, the former, owing to their llowing over the tropies, having a relaxing tendency, while the latter, coming from the foggy region of Cape Horn, aro the precursors of rain and storms. Stately forests, covering an undulating or mountainous comntry, rich valleys, show peaks, rivers, and lakes are the characteristies which strike a traveller visiting Paraguay for the first time. But bad roads, no conveyances, and endless other drawbacks, make travelling in Paraguay not more the "Fool's Paradise" than the exploration of such countries usually are. The plants and animals are those of the neighbouring regions; and of the animals enumerated by Azara, one of its earliest, and still one of the most trustworthy of its explorers, the locust is the least welcome. It pays periodical visits, and sometimes before it leaves devastates a whole district. Its mineral resources are copper, iron, and various precious metals, all, as yet, imperfectly developed. Timbers of many valuable kinds abound. The harder of these will sink when thrown into water, showing the density of their texture. Hence, in Buenos Ayres and the other towns of the treeless plains of Argentina, they are held in great esteem by builders. Salt is so scarce in the country that, in the course of the war, on account of their constitutions being enfeebled by the want of it in their food, the wounds of many of the soldiers would not heal. During the reign of Francia, Paraguay was "hermetically elosed" to the world, by its rivers being shut against its outward or inward commerce. Both aceordingly were in these long years non-existent. Under the Lopez régine trade was greatly hampered by Government monopolies, by war, and by the ruin which subsequently overtook the country; yet, up to 1860 , commerce was rapidly increasing, the exports showing a large increase over the imports. The former consisted of yerba-maté (of which more anon), tobaceo, dry and tanned hides, bark for tanning, oranges, timber, \&e., the whole amounting to a gross value of $1,093,901$ dollars. In 1870

[^68]the imports were put down at 6:57, 146 dollars, and thr exports nt 392,557 dollars. These statistics, however, show how the balance of imports over exports luss been turned by the cinnges the country sulfered through tho war. Nearly three-fourths of the land is ' (invernmont property, 'This consists of pasture tracks and forests (never sold or granted to private individuals), the estates of the old Jesuit fathers, and the numerous Government farms and plantations. When Lopez I. was at the height of his power, each of the then twenty departments " had a town or village with loeal authorities, such as commandant, justice of the peace, and curate; the police administration was the most perfect imaginable, aul a system of espionage pervaded the whole country. Crime was so rare thut murler in rolhery were unknown, and the traveller might go unarmod through the wildest parts of the interior. There were no publie conveyunces, and it was difficult to travel unless by order of Government, when changes of horses were obtained everywhere, and the justice of pence provided such lospitality as is found in other countries in imms." In the prosperous days before the war, though there were few landed proprietors, yet the Government granted leases of the public lauds to any cultivator at a merely nominal rent, and aceordingly, at every mile or so along the highways, small "copueras" of maize, mandioca, leans, eotton, tobneco, sugareane, maize, riee, and other crops were to be met with. In 1570) it was found the Government estates consisted of 22,000 square miles of arable land, 27,000 of mountain and forest, and 5,010 of "yerbales," the rest of the 00,000 spuare miles, which, before the re-arrangement of the boundaries, the country was calculated by the census to consist of, being in the hands of private iudividuals. The "yerbales" are the plantation of the yerba-maté, which, under its Portuguese name of "herva," we have already made the aepuaiutance of. It is used all over the southern part of the continent as a substitute for tea and coffee, and is us ally seen in commerce in the form of powdered leaves and twigs. It is drunk without milk or sugar, and is sucked through a silver tule, terminated by a perforated bulb, which forms a spout to the small gourd which gives its name to the drink. Of course, the poorer people have to be content with a less pretentious equipage. No matter where one goes in the River Plate Republies, in every house the maté-pot is ready to be produced, and the visitor would be considered churlish in the extreme, or deficient in all good taste, who would deeline to apply his lips to the spout of the family gourd. Those who drink the infusion for the first time generally dislike it; luat a taste for yerba, like the taste for most other artieles of meat and drink, grows on one, so that the old residents in Paraguay or on the Pampas are as confiumed maté-drinkers as the veriest gaucho who ever swung a bolas or threw a lasso, We learn, however, from the Messrs. Mulhall that of late years the use of the drink has much diminished in Buenos Ayres. The sale of this article is, or was, Government monopoly. Lopez used to pay the "acopiadores" (or brokers) 1 dollar and 50 cents for twenty-five pounds, and sell it to exporters at double that price; lut at the time, when our informants were writing (1875), it had risen to 2s. per 1b. in Buenos Ayres. The quantity exported in 1876 is said to have been $4,651,000$ lls., representing a value approximating on $£ 300,000$ : a statement not ineredible, since $3,000,000$ acres are oceupied with its cultivation. The yerba* trade is, as we have already remarked, a Government monopoly. The yerba

[^69]speculator, having obtained a concession, takes his gang of "peons" to any chosen "yerbal." There, for the period when the trees are in "season"-six months of spring and summer-he settled down, collecting the twigs and leaves, drying them over a fire, and afterwards beating them into small fragments, and pueking the tea thus obtained in hide bags, after the rudest and simplest proeess (p. 193). The tree is not at present as regularly cultivated in any part of Paraguay, theugh in former times the Jesuits made great phantations in the vicinity of their settlements. At Santiago, it is said, that a grove of no less than 20,000 trees flourished at the end of lust century. One reason for this, apart from the apathy of the nation, is that the wild "tea" is finer llavoured than that obtained in the mission yerbals. The trees of the north also yield a better llavoured "tea" than those of the south of Paraguay, and the yerbn of Chiriguelo is considered the finest of all; but from the dillieulty of aeeess to this remote yerbal it has never been worked, and the yerba of trale is chiefly derived from the distriets of San Pedro and Rosario.*

What the revemue of Paraguay is at the present time it is very diffieult to say. It is chiefly derived from the State property and monopolies, and from custom-house duties. The Budget of 1577 estimated the national ineone at $6: 59,114$, and the expenditure at $\mathbf{x 4 5 , 7 3 0}$. $\mathrm{U}_{\mathrm{p}}$ to the date of the long war Paraguay had no delit. This, unfortunately for the creditors, it has at the present time. But no part of either the principal or the interest of the $\mathfrak{f} 30,000,000$ which the Republic owes to foreigners has been paid since 1874 ; and prior to that date the 8 per cent. was cid out of the loan itself. The country is thus likely, at least for some time to come, to be savel from rushing into further "liabilities" of this sort. In addition, Paraguay is indebted to Brazil abont $£ 40,000,000$; to the Argentine Cinfederation, $£ 7,000,000$; and to Uruguay, $£ 200,000$; the whole of this delt of $£ 47,200,000$, coming under the head of indemnities for the war into which Lopez plunged his wretched country. In 1877 Paraguay had so far repented of its evil soldiering ways as to have Ascuncion garrisoned by only 185 infantry, the sole available army of the Republic, exclusive of detaehments of poliee placel at intervals along the frontier, at the cost of the different mumicipalities.

Paragnayan towns and villages are fers. Excluding the capital, the village populations, necording to a rough estimate made in 1874 by Mr. Johnston, who was engaged for some time in exploration for the Paraguayan Government, the total amounted to 13,800 . Asuncion, the capital, is a pieturesquely situated town, of about 10,000 inhabitants, though at one time it must have contained three times that number, and does not present any very marked difference from other South American Spanish torins, except that it has some fine buildings and excellent "club aecommodation." The shops are poor, and everything excessively dear. A railway of forty miles (p. 205), traversing a beautiful country, runs on to Paraguari, the point at which the projected line to Villa Rica prematurely ended. The place is itself merely a small village, only remarkable as laving been one of the great Jesuit establishments of the seventeenth and eighteenth centuries. Some of their farms in this vicinity had, in those days, 30,000 head of cattle on them; and it may be interesting to some of my readers to know that the records of these establishments show that,

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ations, ed for 3,800. though $y$ very le fine ssively guari, lace is Jesuit ms in esting that,


RULNS OF A JESUIT MISSION CHURCH in paragUay.
julging ly their unmes, some of the "fathers" were of English and Irish birth. Villa Riea is a place of more importance. It is situated in the midst of tobaceo and mandioca tields, and is famous for cigars and the noble woods which cover the hills rumning east and west from it. Its population is 2,000, thus ramking as the second town in Paraguay. Pilar, or Nembuco-a pretty little town amid orange-groves, the few houses roofed with split 'palm trunks-was in Dr. Francia's time the limit to which strangers were allowed to penetrate into the country, and the only place open to foreign coamerce. Villa Franca, Oliva, and Villeta are also quiet villages of much the same deseription. At Oliva Loper lad an cstallishment, from which "guardias" were stationed at every league along the Paraguayan bank of the river (Paraguay), to wateh the wild Indian marauders from the Chaco. At Angostura, a few miles down the river from Villeta, where the river narrows much, Colonel Thompson, a Scotsman in Lopez's service during the war, held at bay for months the whole tleet and armies of the allics. Villa Occidental is a small town of 10,000 inhabitants, founded as late as 1855 , but is now the capital of the Argentine Territory of Chaco. Rosario, San Pelro, Concepcion, and Salvador are the only other places whieh need be mentioned. The later is one inndred miles from the Brazilian frontier, and only remarkable for its manufacture of ropes from the fibres of the aloe. In the time of the Jesuits the inhalitants wove the same material into cloth. Father Dobrizhoffer mentions that the stockings made of its thread were sent to France, and pronounced superior in strength and softness to silk (1Fulhall).

## The Peorle and Prospects or Paraglay.

The civilised population of Paraguay consists of the deseendants of the Spaniards and the native Indians-sections of the great Guarani family, "who occupied the greater part of South America, from the Orinoco to the Middle Parana-and a small ingredient imported in earlier times ly the Spaniards." Though these clements are still to be found in every stage of admixture, the unadulterated originals may he seen here and there in different parts of the country (pp. 190, 197). The Italians in Paraguay, as in most of the neighbouring countries, are the foreigners who carry on most of the river traffic, and in the towns monopolise to a great extent the retail lusiness. Though unquestionably the earlier enumerations of the people were much exaggeated, yet it cannot be disputed that, previous to the war, Paraguny was in a prosperous condition. The remains of descrted habitations in cvery part of the country, and the knowledge of the number slain or of those who fled to the Argentine Republic and Brazil, attest this. Mr. Jolnston found the greater part of the northern districts almost uninhabited. "The department of San Salvador, between the $\Lambda$ quidaban and the $\Lambda \mathrm{pa}$, is a complete desert, excepting that the wild Indians from the Chaco have occupied the abandoned Capilla on the bank of the Paraguay. The districts of the mission south of the Tebicuari are now also all but deserted, though the frequent ruins and plautations, repidly going back to a wild state, show that the former inhabitants must have been mumerous. The bulk of the remaining population has drawn in romed the capital, the heights of the platean of Asuncion and the valleys of the Cordillerita being the only really peopled districts of Parguay." The civilised population is tins confined exclusively to the western portions of the country. The eastern and some of the northern parts are still in possession of the primitive Indian tribes, who are
to this day as free and almost as wild as they were in those happy days when the Spaniard had not lusted after the gold of Don Mendoza's land. The names of these tribes it is mot our province to give; indeed, one author compl-ins that he has not room on his map to ergrave all the different tribal titles which have bien recorded. In truth, these are far too numerous. The Jesuits set down under the name of the chief every little rapidly changing section and sub-division of a tribe. It is, therefore, not surprising to find in even the most recent maps the names of tribes long ago extinct. The wild Guarani are, in reality, divided into two great sections, closely allied to each other. These are the "Canguás,"* or Forest People, and the "Guaymas" (not to be compared with a non-Guarani tribe of the same name which formerly inhabited the country east of the Uruguay). The former occupy the dense woods. They appenr to be a mild, inoffensive people, keeping themselves very much to themselves, cultivating a little mandioca, and subsisting on this or by the produce of the forest or the river. The bow and short iron-shod spear are still their only weapons. The Guayanas are not so barbarous as the Canguás. Some, indeed, still profess a tattered remnant of the Christianity their fathers learned from the Jesuits, and are civilised enough to see it to be to their advantage to now and then seek work in the yerbals. These two divisions are, however, not the only Paraguayan Indiams. Embedded in the midst of the Guaranis-hemmed in by them on all sides-are a lew tribes altogether different in race, language, and customs. Among these are the wild Tupis-dreaded of old by the Mamelueos of Sano Paulo, and still the terror of the Lpper Parame tribes-and the Ibitorocays, a very little known people. On the western side of the laraguay are a few representatives of the once great tribe of the Payaguas, from whom the river rrobably derives its name. At one time they held command of the whole navigation of the river; but after long years of conflict with the Spaniards, they have been forced to yieh to the inevitable, and now live, a dozen or two in number, under the protection of the descendants of their old enemies. In the Gran Chaco, bordering on Paraguay, are, at the present day, two great tribes: the Lenguas (or Mbayas) and the Tobas. The Lenguas got their name from the whites, owing to their peculiar burbote, or chain ornament, a semicircular piece of wood passed through a slit in the lower lip, which gives it the appearance of a langing tongue, or lemyna (much the sar.s in the Botucudo, p. 160). As Azara tells us that, in 1721, the nation was so near death that only fourteen men and eight women remained, it is probable that, either the Lenguas have attained new strength, or that their name has passed over to other tribes which originally did not bear it, for, at the present time, the tribe so called is a momerons one. The Tobas, like the Lenguas, are a nomadic race; but their chief place of congregration is about the Jower Vermejo, outside the Paraguayan area. The name Guigcaru was that of a line tribe of Indians who formerly inhabited the Chaco opposite Asmucion; but the tribe was completely destroyed before the beginning of the century. "Although the name is still used in Paraguay to designate the Chaco Indians in general, just as that of 'Camba' is applied to the Brazilians, or as we might use the term savage or barbarian, it has now no special application whatever." $\dagger$

[^71]A people so industrious, loyal, and gallant deserved a better fate than that which seems ever to bave been their lot. Nor ean we believe that a land so beantiful, so rich, and withal so suitable for the home of man, will always remain one of the waste places of the earth. South Ameriea-the reader of these pages has had abundant opportunities of seeing -is cursed with an itch for revolution-for ceaseless, senseless change. The people got self-government either, in some eases, hefore they were ready to appreciate it, or in others, after they had ceased by long centuries of misrule and all unwisiom to understand the use of the dangerous weapon they bad wrenched from the nerveless grasp of Spain. Hence they abused it. It cannot be said that Paraguay was in either of these plights. Spain had direetly governed the country but little; and, until the Jesuit establishments were broken up, the country had really enjoyed a kind of self-government, tempered by ecclesiastical tyranuy. But the rule of the Jesuits and the misrule of Spain, which followed, only fitted the people for the "Double Consulate" and the despotism of Francia, the absolutism of the elder Lorez, the mad ambition of the younger one, and the chaos which followed the wreek and ruin wrought by him.

## Unuglay.

The Republic of Uruguay, or Banda Oriental, is the smallest independent State in South America, though one most favourably situated in respect of soil, geographical position, and climate. It lies south of Paraguay, and is separated from the Argentine Republic by the Rivers Plate and Uruguay. The former is, opposite Buenos Ayres, twenty-eight miles wide. Uruguay differs from the great plains of Argentina in being intersected with numerous cuchillas, or sierras, which is the loeal term for ranges of mountains. Many of its features, however, are the same as those of la Plata, the country being excellently adapted for sheep and cattle faming. The commerce of the eapital (Montevideo, p. 209), situated near the mouth of the River Plate, is nearly equal to that of Buenos Ayres, from which port it is distant 120 miles. Salto and Paysandú, on the Uruguay ; Canelones, Tacuarenbó, and Minas, in the interior ; Mercedes, on the Rio Negro ; Colonia, abreast of Buenos Ayrcs; and Maldonado, on the Atlantic, are the next towns of importance. In some plaees the country is well wooded and diversified in appearance. During the late years, civil war-that chronic curse of South America-has desolated it. Nevertheless, there has been a great influx of immigrants, hoth from Europe and even from the neighbouring Argentine Republic. The population was between 1824 and 1864 inereased five-fold, and was returned in 1876 officially at 445,000 , of whom 110,000 were in the department of Montevideo, and the remaining 335,000 in the rural departments. The eity of Montevideo had alone a pcpulation of 92,000 (now considerably more).* The area of the Republic is estimated at 73,038 square miles, or more than double the size of Ireland, aad not much short of twice the size of England and Wales.

[^72] of the seeing le got others, he use Hence in had broken iastical 1, only lutism llowed sition, epublie -eight d with of its dapted tuated h port o, and ; and suntry -that great entine was nt of evideo olic is much

Most of the Uruguayan commerce is with Great Britain, the rest being apportioned among France, the United States, Brazii, Spain, and Italy. To us Uruguay scnds hides and tallow, and receives in return iron and cotton goods. Its revenue was in 1875 about $£ 1,488,400$, and its expenditure $£ 2,529,092$. The Republic is indebted to foreigners more than $£ 8,000,000$, and besides has an internal debt of about $£ 3,500,000$, exclusive of a floating one, calculated at a sum considerably larger. In addition, there are unsetiled foreign claims against the State of $£ 1,200,000$. The Republic has, unlike most of its neighbours, continued to pay its debts, more than one-half of the expenditure of the State being due to that unaccustomed feature in South Amcrican finance; though, with the cnormous expas: $n$ of the paper eurrency, with a forced circulation, the period when Urugruay will cease

to be singular among her sister States is suspected not to be far off. Railways to the length of 206 miles were open in 1876, and telegraphs to the extent of 986 miles stitched some detached parts of the country together; and the length of both has materially increased since the ins statistics were published. The soil is rich and well fitted for agriculture. "Being irrigated," writes Mulhall, "by a thousund streams of permanent water, and most unencumbered with timber or brushwood, the husbandman hus only to till the virgin soil and await the harvest time, without fear of drought, locusts, dust-storms, or the like. The departments chiefly devoted to agriculture are Montevideo, Canelones, San José, and Maldonado. In the time of the Spaniards, the country produced neither wheat, rye, nor barley. At present corn is raised in such quantities as to keep 100 steam, wind, and water mills in constant work, besides a large exportation of grain to Buenos Ayres. In the departments of Canelones and San José we meet suudry colonies of natives of the Canary Islands, all occupied in raising wheat and other cereals. On the banks of the Uruguay, alove the

Rio Negro, experiments have been suceessfully made for the growth of yerba-maté and tobaceo, and it is even thought that the climate and soil are suitable for the production of tea and indigo. Cotton has been grown at Salto and elsewhere, while the plantain and sugarcane may be cultivated in many parts, and the Eucalyptus globulus, or Australian gum-tree, thrives in a wonderful manner." Fruits and medicinal herbs abound in the woods, and some of the departments yield excellent timber, such as walnut, white eedar, myrtle, mulberry, blaek laurel, and many other kinds. The guava and lapachn are the woods " proper to the country," suitable for carpenter's work; the ñandubay is in $1^{-1}$ for fences; the quebracho and scarlet willow furnish exeellent dyes; and so forth. Diu: ag stone, marbles, agates, abound ; and gold, copper, silver, iron, and lead are found-the gold, indeed, it is believed, exists in large quantities-while other mineral resourees could also be enumerated. But the great resources of Uruguay consist in its sheep and cattle, the latter being familiar to us in the form of Paysandú tongues, tinned beef, and Liebig's extractum carnis, which is prepared at Fray Bentos, a town of 2,000 inhabitants on the River Plate. In some places deer and ostriches are abundant on the plains. Notwithstanding that dogs-of a very eurrish breedare, as in Buenos Ayres, so numerous as to be a nuisance, "tigers" (jaguars) are sometimes seen on the islands of the Uluguay and in the thickets bordering the rivers, while pumas are found now and then in the forests of the Rio Negro. They sometimes do so mueh destruction in the sheepfolds that the "estaneieros," or farmers, form parties to hunt them down. The best elass of shopkeepers in Montevideo are Frenchmen ; Italians also are found in every grade of society; but the more considerable merehants are, in most eases, either German or English. The two latter close their houses of business on the Sunday ; but in Montevideo all the other shops are open then as on any other day of the week, or, at least, until the hour approaeles for the bull fight at the Union Cireus. The "Orientals," as the Urugayans are usually called, do not seem to have grent commereial capacity, though some of them are wealthy estancieros and capitalists. The Government offices are, however, naturally, and perhaps not altogether to the advantage of the country, filled by the natives. Montevideo, so called from the cerro, or mount, in the vicinity, is, by the gencral verdiet of all visitors, the "cleanest, handsomest, and healthiest city" in South America. With the exception of Salto and Paysandú, which have both 10,000 inhabitants, none of the other towns of Uruguay can boast a population of more than 5,000 , and, indeed, Melo and Union, a suburb of Montevideo, are the only ones which attain that figure, most of the others ranging from 1,000 to 2,000 . The language spoken is, of course, Spanish, though such is the number of foreign residents-Italians, Spaniards, French, and Basques, Brazilians, Germans, and English—that Uruguay, and espeeially Montevideo and the department of Paysandú, are very cosmopolitan. In the capital, 480 ont of every 1,000 people are foreigners. Yet Uruguay is singular in possessing no Iudians in all its territory. Moreover, the Africans, originally imported as slaves, are getting fewer and fewer every year, and even the "Mestizos" are mysteriously disappearing. There is perfect religious freedom, great liberty of the press, and edueation, if not high, is as well advanced as in most South American countries.

To this brief sketch of Uruguay we may add a few words regarding its history. For the facts I have mainly relied on the editors of the Buenos Ayres Standurcl, thouge to those acquainted with Spanish the literature of the history of Uruguay is rether
extensive.* After Trugnay hatd, with the aid of the province of Buenos, won its freedom from the Spanish yoke, it formed one of the provinces of the River Plate. In 1815, one year after the achievement of its independence, Montevideo seceded and formed a republic by itself. This was of brief' duration, for the Portuguese invaded it, and in $15: 1$ compelled the Oriental Congress to deeree the amexation of the Banda Oriental to the Kingdom of Portngal and Brazil; and when Brazil became independent it was united to that empire, under the name of the Provincia Cis-Platina. In 18:5 , with the aid of the Argentines, the country again attained its independence, and soon after, with the exception of a part of Misiones retained by Brazil, the nationality of the "Republica Oriental del Uruguay" was tinally recognised. In 1839 troubles arose with Buenos Ayres; and in the ensuing war and siege of Montevileo, which lasted for nine years, the country was reduced to that state of ruin and desolation which seenns normal to South American countries at uneertain but frequent intervals. At last, in 1851, a rising against Rosas compelled the "dictator" to recall the Argentine troops. Then for a time Uruguay had peace. But in 1865 the revolution of Flores once more phonged the country into war, and necessitated the intervention of Brazil and the expulsion of the President. Close on this followed the Paraguayan struggle and the assassination of Flores. There have heen four Presidents since then; and at present, under the latter of these, Colonel Latorre, elected in 1876 with dietatorial powers, the country is beginning once more to experience something like prosperity and that state of tranquillity to which the younger generation of Orientals have been strangers.

## CHAPTER XIV.

## Tife Augentine Republic.

Crossinn the River Plate-the Rio de La Plata of the Spaniards-we are at once in a new land, physically and politically. We have left behind the mountains and forests of Paraguay and Uruguay, and are in a land of grassy plains-the Pampas, or great prairies of Sonth America. Politically, we are in the Republic of La Plata, the Argentine Confederation, or, as it is more familiarly called, the Argentine Republic, part of that immense region which, under the old Spanish rule, was comprised within the viceroyalty of Buenos Ayres. The water which laves its northern boundary, and forms the highway for eommerce to enter the continent in this direction, is one of the greatest rivers in South America. A traveller can take steamer at Montevideo, and sail, withont a stoppage, to the capital of the Brazilian provinee of Matto Grosso, 2,000 miles from the sea. At Monteviden the river is 465 miles wide, and brackish. At Buenss Ayres, though it is twenty-eight miles from shore to shore, yet the water is quite drinlable. Twenty miles alove Buenos Ayres the

[^73]Parana and Uruguay flow in. For 900 miles from its embouchure near San Fernando, up to Tres Bocis, the river is navigable for steamers; higher up, small boats only can sail on it. The Paraguay, which joins the Parana at Tres Bocas, is navigable as far as the Cuyaba, near the city of the same name, the capital of the province of Matto Grosso, 1,100 miles above the city of Asuncion. The Uruguay at ordinary times is only navigable as far as Salto, but when the river is in flood steamers can ascend the rapids and sail far into Rio Grande. These are the main streams of the Argentine Repullic and other "States of the River Plate." But it must be remembered that each of these rivers has tributaries, often navigable for long dist.nces, and any one of which in Enrope would be considered a great river. The average depth of the Rio de la Plata is eighteen feet; the greatest thirty-six feet. "The tide rises and falls," writes Mr. M. Mulhall, to whom we are indebted for these interesting facts, "regularly at Buenos Ayres, although the river is sometimes affected by strong winds. The South Atlantic tidal wave-twice every twenty-four hours-ascends the Plata, and is perceptible for over 100 miles up the Parana and Uruguay. It travels $258 \frac{1}{2}$ miles in eleven hours forty-five minutes; it is about 16 inches at Buenos Ayres-the medium depth of water to Las Palmas being 10 feet, distance 64 miles-and ascends the Palmas, 55 miles, at the rate of 19 miles an hour; average depth of Palmas $38 \frac{3}{4}$ f'eet. At new or full moon it is always high water at Buenos Ayres; generally when the meon is on the horizon it is high water, and low when she passes meridian. Soundings in the port of Buenos Ayres vary from $10 \leqslant 22 \frac{1}{2}$ feet. The mean current of the River Plate seems to be 118 feet per minute on the surfacc, 103 at 4 feet depth, and 41 at the bottom." The Parana alone has more water than all the rivers of Europe put together. The scenery, though in some places monotonous, is yet very beautiful, especially in the upper reaches, where the river flows between rocky banks. One hundred and fifty leagues* above Corrientes -the "City of the Seven Currents," formed by as many projecting points of land just above the town-are the Falls of Guayra. In 1863 Lopez sent Colonel Platiño to explore them, and his report was as follows:-"At a distance of thirty miles a noise is heard like thunder. Even at three miles off it is difficult to hear any one speak. Some settlements had to be abandoned because the inhabitants became deaf. The whole region is in the hands of the wildest class of savages, and a miserable race of Indians." The river a little above the Falls is 13,000 feet across, "having more water than all the European waters collectively." This great mass-according to the descriptions of Azara, and confirmed hy subsequent travellers-narrows to 200 feet, and falls at an angle of 50 degrees, a distance of nearly 60 feet. In the vicinity of the Falls continuous showers fall from the spray, which rises in columns at the moment when the waters strike the walls of the rocky gorge, and when the sunlight plays on it rainbows of the most lovely colours may be observed. It is computed by M. Revy that a million tons of water per minute, at a velocity of 40 miles per hour, falls over the precipice. The weight of this enormous flood falling

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on the earth causes a kind of miniature earthquake. At Corrientes the same explorer eonsiders that the Parana drains a basin of 500,000 square miles, and gains nothing in volume afterwards, as it loses by evaporation as much as it gains by the great tributaries which fall iuto it. The Paraguay is another of these. Like the Parana in its wilder parts, it flows past virgin forests, lovely isles, and great pampas, or, in the vicinity of the numerous little towns on its banks, by mandioca and yerba fields down to the water's edge, or country houses embosomed in orange-groves, seeming to the passing voyager the picture of peaee, away from the busy world, and whieh, in reality, have been sacked by robbers and harassed by fire and sword. The scenery of the Uruguay is the finest in theso regions, whilo it is reported that the Salado and Vermejo, which belong to the Gran Chaco Territory, are navigable, though as yot they have been most imperfeetly explored.

So much for the rivers of this wide land. The terra firma is not less remarkable. Within the Argentine Republie alone we have an area of at least $5.55,700$ square miles, The three "Platine Ropublies" cover nearly $1,400,000$ square miles, and possess a population in all of less than three millions, or about two inhabitants to the square mile. Well might M. Vaillant declare that they are scarcely inhabited, for the population is out of all proportion to tho extent of the land, the excellence of the climate, the capahilities of the soil for agriculture, its richness in minerals, and the unrivalled water-ways which it possesses for getting that produce out of the country-the River Plate and its tributaries alone draining one-half of the continent. The Argentine Republic may be roughly described as an almost unbroken plain, stretehing-if we include Patagonia and the Gran Chacosonth to the Straits of Magellan, and the Argentines claim even to Cape IIorn. Its frontier provinces thus comprise some which have attained a considerable degree of civilisation, and others which are yet steeped in barbarism and even unexplored. Buenos Ayres is equal to all the others collectively, in wealth, population, and importance. "The city of the same name is the seat of the National and Provincial Governments, and one of the principal seaports of Scuth America. In the refinement of its society, progressive spirit of the people, and activity of trade and industry, it yields to no other city on the continent, and has earned the title of 'the Athens of the Sonth.' Entre Rios and Santa Fé have of late years attracted much notice as shecp-farming comntries. Cordoba, the heart of the interior, has 1 ceived a great impulse from the Central Argentine Railway. San Juan and Catamarea are remarkoble for their mineral wealth, Mendoza (pp. 220, 221, 224), at the foot of the Cordillera, formerly the chief city of the Cayo provinces, has emerged from the ruins of the earthquake of 1861. Santiago and the other northern provinces have been hitherto so isolated as to be a.most valueless ; but the navigation of the Vermejo and the new narrow-gauge railways will unite them, through Cordoba and Rosario, with the River Parana, the great artery of the Republic. The provinces called Littoral, from being adjacent to this river, have an immense advantage over the rest, possessing cheap freights and easy transit to Buenos Ayres and the commercial world." The census of 1869 , which gave the population (exclusive of savages) at $1,877,490$, does not at present actually represent the number of Argentine citizens or settlers, for since that period they have much inereased, though it is probable that the disproportion of men to
women still continues ( 897,780 to 815,572 ). Of the population, 610,432 individuais were inhabitants of cities; $1,114,160$ of the "camp," or country; and 12,330 lived either on the rivers or on islauds in them. In the Republic, at that date, there were 211,993 foreigners-that is to say, people who were not born in the Republe or naturalisedthe relative numbers being as follows:-Americans, Italians, Spaniards, Freneh, Englisiu, Swiss, German, \&e. The chief cities were-Buenos Ayres (Plate XXV1I.), with nearly 300,000 inhabitants ; Cordoba, 28,023; Rosario, 23,149; Tucuman, 17,135; Salta, 11,716; Corrientes, 11,218; and Santa Fé, 10,670.*

## The People and their History.

It is believed that the first of christened men who stumbled on the Rio de la Plata was Juan Dias de Solis, a Spanish mariner, with designs against the Molucea Islands. But Solis left his bones on the Uruguayin shore, and his scamen turned the prows of his vessels back to the Port of Lepe whence they had sailed. Ten years afterwardsin 1526-the famous Sebastian Gaboto-or Cabot-again entered the river of Solis. He was in search of a passage between the Atlantic and Pacific; but was foreed to abandon his intention by want of provisions and one of those mutinies which seem to have been normal among the ill-disciplined adventurers who, in those days, manned vessels bound on such errands as Don Sebastiano's. The trinkets which he saw among the Indians mado him eager to explore the gold-producing lands in the interior, whence they had obtained by barter with other tribes the metal so precious in his seamen's cyes.

But he never got much further advanced in his design than sailing some way up the Parana, Vermejo, and Paraguay, and calling the Great River into which they all Hlowed the Rio de la Plata-the River of Silver; for just as he was about to penetrate westward, a vessel, commanded by Don Diego Garcia, arrived in the river. This expedition was especially designed for the exploration of the country discovered so long before by Solis. "As was the custom among the conquistadores," the two commanders immediately fell a-quarrelling, and Don Diego sailed for Coruña; and, in case he might work him mischief at Court, Don Scbastian speedily followed his example. Before leaving, however, he founded the first European colony on the River Plate, by garrisoning the fortress of Santa Esperitu, which he had built. In lij35, a wealthy speculator-one Don Pedro de Mendoza—founded the city of Buenos Ayres, or, to speak more correetly, the villa of the Suntisima Trinidall, which he called the Port Sauta Mariat de Buenos Lieres (Saint Mary of the Good Airs). From that day, with varying but ever alvancing fortunes, the Spaniards continued to form settlements in this region. Sometimes the Portugucse held the colonies for a time, but the

[^75]Spaniards were not long in recovering possession and behaving after the usual Spanish method. That is to saly, freedom of commerce was unknown; the colonists were of no account; all was reserved for the merchants of Cudiz or the traders in office from Mudrid. Things were going on in this fashion, when, in 1806, an English army appeared in Buenos Ayres. Spain was just then an ally of Napoleon, and, therefore, an enemy of England. Geneml Beresford soon carried all before him; the authorities presented the eustomary addresses, and everybody hurried, with suspicious avidity, to swear allegianee to King George. All seemed secure, when there was an uprising of the Creoles, and the English garrison was foreed to surrender. Another English army sent out was not successful in retrieving the disaster of the first one. It, too, was defeated; and after allowing the colonists to experiment for a time with different Presidents of their own ehoice, the Junta of Seville sent out Marshal Baltazar Hildago de Cisneros as Viecroy of the Plata. But he had not well landed at Buenos Ayres before news came that the Junta had been dissolved, and, accordingly, with it disappeared the authority of the Vieeroy. Then commenced civil war. The country got divided into a Spauish and a "patriot" party, who formed armies and fought each other after the method with which the world was som to get familinrised in South America. Paraguay refused to join the movement, and declared herself independent, while Montevideo was rightly looked upon as a locality but indifferently enthusiastic in the "eause." To add to their disorder, the "caudillos," or guerilla leaders, refused to recognise the autherity of the National Committee, and inoeulated the country with that epidemic of civil war from which it has never since been altogether free. But, thanks to the efforts of Belgrimo and Rondeau, so much of the country was in 1813 wrested from the Spaniards that something approaehing to a regular constitution was drawn up by the "pa'riots." But reverses again overtook the insurgents, and it was not until San Martin and Alvear took charge of military affairs, and Admiral Brown had almost destroyed the Spanish fleet, that the La Plata people began to see blue sky again. On the 9th July, 1816, the United Provinces of the Plata proclaimed their complete independence, but soon after civil war broke out. By the beginning of 1820 the last "Director-General" was overthrown, and the Confederation was declared dissolved, and each of the provinees "received liberty to organise itself as it pleased. Thus was anarehy officially proclaimed." A new Republic was organised in 1825; but in less than two years each province went on its own way once more. A brief war with Brazil did not mend matters. The rival military chiefs took to shooting each other in their affected enthusiasm for a confederation of all the provinces, which chaes ended in $18: 9$ by the Legislature of Buenos Ayres electing Juan Manuel Rosas, one of the commanders who had in this turmoil risen to the surface, Governor of the Provinces, and accorded him extraordinary powers. The name of this tyrant was for years one of terror in the Argentine Republic. Yet, during his first term of office he did not come out in the colours so familiar afterwards. On the contrary, he behaved reputably and declined re-election, and retired to the country. But he was only waiting his turn. His successors were apparently either weak or unfortunate men, for they had soon to retire. Then, in 1835, the country, wearied of this anarehy, offered Rosas the Dictatorship, and for the next twelve years this despot reigned-to use the expression
of one of the Argentine historians-"like a madman. Not mueh good was to be expected of him; but the worst fears of the wisest citizens were far surpassed by the tyrunt who has for over written his name in bloody characters upon the historical page of his comntry." Various attempts were made to displace him, but all in vain, until aided by the Emperor of Brazil, Justo De Urquiza, Governor of Eintre Rios, defeated the Dietator at Montc-Cuseros, on the 3rd of Februnry, 185̈2, and forced him to flee to England, "leaving


VALLEY LEADINO TO THE PABs OF CSIALLATA, IN THE NECOND CHAIN OF THE COKDILLEKA, NEAR MENDOZA, AHOENTINE HEJCBLIC.
the eity of Buenos Ayres," writes Mr. Parish, "in a delirium of joy at its sudden emancipation from his tyranny." Urquiza now became President of the whole Argentine Confcderation, with the exception of the important province of Buenos Ayres. The latter raised an army, and after two battles was declared victorious. The National Government was then transferred from Parana to the present capital, and Geweral Mitre eleoted President of the Republic as now constituted. Sarmiento sueceeded Mitre; and in 1874. Avellaneda was plected to the Presidential chair, greatly to the benefit of the country, which may be pronounced as now possessing that profound peace and harmony
which, with a few exceptions, it has been fortunate to enjoy since the closo of the Paraguayan war. It is true that, in addition to several minor affairs of the sume kind, there was an armed revolt during the heat of the electoral struggle which put Avellaneda into power, and thut there have been several threntened invasions of Indians from the Plains. But these are really trilles in South Amerien, and the historian would be hypereriticully ungenerous who would dwell too long upon such incidents. Indeed, Major Melehert, an Argentine wurrior, will insist that such a condition of things is much to the honour of South America in general, and to his country in particulur. "So far from the frequent civil wars being discreditable, it would be diffieult for it to be otherwise, unless the human race itself were changed; as it appears only uatural that, in a country emaneipated and suddenly delivered to its own guidance, men of note and desirous of glory, who for the most part had distinguished themselves as soldiers in the War of Independenee, should form parties amoing their personal adherents, and struggle to perpetuate themselves in power." This view of the duty of a public man is so unique that it would be "pity to spoil it by uny comment, for it affords a key to many of the troubles of the HispanoAmerican Republics.

The present Constitution of the Argentine Confederation is in outline as follows :-The fourteen provinees eleet 133 representatives, who, in their turn, elect a President for six years. The Legislature consists of a Congress, consisting of a Senate numbering twentyeight, and a House of Deputies mumbering lifty; eact member of the Congress receiving $£ 700$ per annum. There is also a Vice-President, who is President of the Senate; and in other respects the provisions of the Constitution, for the due performance of their duties, are much the same as those in the United States document of the same description. The members are appointed by the President, who is also com-mander-in-chicf of the troops; the governors of the provinces are clected by the people for a term of three years, and are to a certain extent independent of the Central Government, being invested with powers which are not unfrequently abused. There is freedom of conscience, but tho sceond article of the Constitution expressly stipulates that "The Federal Government shall maintain the Apostolic Roman Catholic Faith." Article 29, wisely taking warning from the past, provides that "Congress cannot grant to the exenutive, nor to the provincial legislatures, any extraordinary faculties," nor the "sum of t'le publie power," nor "renunciations or supremacies, by which the lives, honour, or fortune of the Argentines shall be at the mercy of any Government or person whatever. Aets of this nature shall be irremediably null and void, and shall subject those who frame, vote, or sign them to the pains and penalties incurred by those who are infamous traitors to their country." Article 3:. "The Federal Congress shall not dictate laws restricting the liberty of the press, nur establish any federal jurisdiction over it." Article 35 (the last) stipulates that "the names whieh hatve been sureessively adopted for the nation, since the year 1810 up to the present time-viz: : The United Provinces of the Rio de la Plata, Argentine Republie, and Argentine Confederation-shall henceforward serve without distinction officially to designate the Govermment and territory of the Provinces; whilst the words Argentine Nation shall be employed in the making and sanction of the laws."

We nave nlready noted the diffienlty of arriving at anything like an neeurate census either of the prpulation or aren of the Repulbic, simply heromso the lommaries of the country are so imperfectly determined. Aecording to the census of lsti: -as aready noted-the population of the country, including saviges, was $2,756,902$, exclusive of these $-1,577,490$-the whole aren of the provinces heing 515,700 lagglish square miles. These are as follows:-Littoral or Riverine Provinces-Buonos Ayres, Santa Fé, Entre Kios, and Corrientes; Provinces contignous to the Andes-Rioja, Catamaren, San Junn, Mendoza; Central Proviuces-Cordova, San Luiz, Suntiago del 1istero, Tueuman and North Provinces-Salta and Jujuy. The calculation of Dr. Burmeister,* however, is somewhat different, but for our purposes this will suffice. The savage Indians who wander over the national territories of Gran Chneo, Misiones, Pampa, and Patngonia, mumber, aceo gr to the census, 03,291 ; lont it is evident that this ean only be a rough estimate. Im 'ion has, however, within the last few yeurs greatly increased the inhabitants of the Argentme Republic, the number of arrivals laving, during the years between 1863 and 1870, varied from 10,408 to 79,712. In the latter year they fell off to 30,965 . Of these, the greater number wère natives of Italy, Spain, and lrance, and the remainder of Great Britain, Switzerland, Germany, and other loenlities. The Linglish are, however, found in the Argentine Republie in great mumbers. At present it is estimated that in the province of Buenos Ayres alone there are $30,000 \dagger$ Euglishmen, or men of British deseent, ehicfly furmers, whose property in the nggregate is warth several millions sterling. Herr Napp justly remarks that, as regards the origin of the people in all the River provinees, except Corrientes, the majority of them are of European descent. In the interior, especially in Santiago and Catamarea, the Indian blood is more visible. The population is, however, recognised as having to a considerable extent as its basis the mixed deseendants of the conquistadores and the aboriginal tribes of the eountry. The negroes originally imported as slaves have also contributed their share to the gencral mixture of races; while the large immigration from the Mediterranenn comntrics has naturally had its effect upon the character-moral, mental, and physical-of the Argentines. New arrivals are not, as in most other Spanish comntries, looked on with indifference or even dislike. Great hospitality always awaits them, especially in the interior, where Old World life and virtues are more persistent among the people than in regions nearer the seats of civilisation. "As yet," writes an Argentine, "you find there that old hospitality of which mention is made in the Old Testament, and men who are untiring in all kinds of fatigues, and models of magnanimity, love of country, and valour. The last quality, in particular, could not be more lively nor more general in any other people. The sons of the Argentine Republie, in all the cireumstances of life, manifest a supreme disdain of death; and this same virtuc-where the enstoms and inabits are corrupt-sometimes causes but small estecm of the life of their neighbours."

The Argentine women are in disposition lively, and, thongh not without the faults of their race, are generally good mothers, and oceupy a position of no little influence

[^76]in soeiety. The young people soon mature, and accordingly, at an age when in Europe his contemporaries would be at school, the Argentine is engaged in affairs of State, an "in" or an "out," or laying the foundation for a home and a future. Vanity, an overweening idea of their now importance in the world, an inability to brook the rule of the majority, and a general tendeney to rolomontade, may be noted as some of the defects under which the Argentines, like must young nations, labour. ©"The Argentine is always benevolent ani affable with foreigners; that brusque nativism which, in a part of North America* treats the immigrants, and even their descendants born in the United States, as insignificant intruders, is unknown in this Repablic. On the contrary, foreigners cccupy a distinguished position here, and are eligible to almost all public posts, whether Municipal, Provincial, or National. The welleducated foreigner has aceess to all circles and families, and the labourer is received with much kindness. The formation of classes and castes has not been possible anong a pers o democratic as the Argentines. Everybody possesses the same rights, not only wablic but also in social life. Not even the aristocracy of money has found a propitious soil here: whilst, on the contrary, a true worship is dedieated to intellectual aristocracy-nevertheless, without yielding to it any privileged post or extraordinary rights; for the Argentine is proud: he spontaneously recognises intellectual superiority, but does not forget his own merit." The real meaning of this eulogy of Mr. Napp is, we suppose, that the Argent. : is quite willing to honour brains in the alstract, but that when it attempts to exercise its legitimate rights of gaining for its possessor the privilege of ruling, the proprietor of the soil deelines to acknowledge its claims in the concrete.

Though Spanish is the national language, yei in some parts of the countrymore especially in Corientes-the old Guarani has not yet been entirely abandoned. English and Freseh are taught in all the secondary sehools, and German has of late years also asserted its claims to be studicd. Germans, indeed, are fast becoming an important element in the Argentine Republie, since several of the professors in the University of Cordoba, and in the Gymnasia and colleges, are of that nationality. The inhabitants of the towns are gay. Old and young alike join th all amusements, and French and Italian music is cultivated. But the inbabitant of the boundless lampas is a more sedate individaal. He seems impressed by his surroundings, and to have transferrer. this influence to all his movements. Even his music is different, for, instead of foreign airs, the only melody heard in the vicinity of the estancias is the " monotonous improvisation of the Gaucho centor, accompanied by his guitar" (p. 217).

At the census of 1869, iearly one-third of the population belonged to cities. The Republic had then one city (Buenos Ayres) with about 1s0,000 inhabitants; two cities with from 20,000 to 30,000 ; five cities with from 10,000 to 20,000 ; twentytwo with from 3,000 to 10,000 ; sixty-seven tnwns with from 1,000 to 3,000 ; and seventy villages with less than 1,000 inhabitants. The fourteen capitals of provinces held $\mathbf{2 0 5}, \mathbf{1 4 . 3}$ inbalitants, or excluding Buenos Ayres, the other thirteen united had only 127,354. Next to Buenos Ayres, Cordoba contained the greatest number, viz.,

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A "GAUCHO C.INTOR," OR HERDSMAN GUTTAR-PLAYER OF' THE PAMPAS.
28.523, but of late years Rosario, in the province of Santa Fé, has become the second city in the Republic.*

In twenty years some of the provinces, such as Buenos Ayres, Entre Rios, and Santa Fé, have doubled their populations. Of foreigners in the country, the Itaiians are by far the most numerons, South Ameriea having for years been the El Dorado of this race. The Spaniards are less than half the number of the Italians, though there are nearly as many Frenchmen as Spaniards, and about the same number of English and Germans (including Swiss) not born in the country.

The citizens of the United States are comparatively few; but in energy and influence they make up for the numerical unimportance.

## Tile Comarerce of tie Pampas.

Wool, hides, and tallow are the staple products of this grassy land. In the province of Buenos Ayres there were, at the date of the last census, above $45,000,000$ sheep, and the annual yield of wool is over $100,000,000 \mathrm{lbs}$., or somewhat less than the total clip of Australia. All this has been accomplished within a comparatively short space of time; and were more attention paid to the improvement of the breed of sheep the return could be still further increased. The quantity of sheep in the Republic is estimated at $\mathbf{i} 7,546,448$ animals, and their value at $£ 16,546,874$. Some little attention has been paid to the rearing of llamas, especially in the rovince of Jujuy, where are 16,000 , valued at $\mathfrak{x S , 0 0 0}$; but it is likely that in time both they and alpaeas will be more extensively bred in the pampas of Buenos Ayres. The vicuña is not bred, but, on the coutrary, in some parts of the country, such as in the province of Catamarea, where it still exists in considerable floeks, it is hunted as a wild beast. At certain seasons of the year, when the animals have most wool, great battues are organised for their systematie butchery, only to despoil them of their wool, employed in the making of fine shawls, one of which is worth from $£ 20$ to $£ 40$. Goats are extensively bred. The groatskins of Aconquija are in great request for saddle-covers. The goats of Tucuman are aiso held in much esteem; and it is believed that a cross betreen them and the Angora animals-which, as well as those of Tibet, have been introduced-would result in a breed surpassing in merit any at present known. Hogs prosper well, but the supply is insufficient for the demands of the country. The actual number of goats, according to the latest census, is $2,863,227$, and that of pigs 257,368 . Domestic fowls are dear and scarce. Eggs will often cost 4d, apiece; and a full-grown fowl brings in the eitics from 4s. to 6s. Game is abundant. Wild fowl swarm on the solitary waters, and partridges come and feast in great droves on the plains; but quadrupeds are fewer, though in some districts, deer, the pampa hare, guanacos, armadillos, tapirs, \&e., are found; while pumas-"tigers"-invite the bolder sportsman; and the pursuit of the Nandu ostrich (Rhea Americana) is, according to the official historian of the Republic, "an infatuating pleasure to the hunter on horseback." Fresh-water fish is abundant; but, as happens in most Roman Catholic countries of South America, large quantities-dried, pickled, and preserved

[^78]in oil-are imported for use during the fasts of the Church. As there are no legislative enactments in regard to the chase and fishecies, the chances are that if the Republic does not look to the matter the wild animals of the country will speedily be exterminated.

Horses exist in enormous quantities. The horse is the inseparable companion of the gaucho, or cattle herd, and is equally necessary in keeping up communication with a people so widely seattered as are those of the Argentine Republie. The horse, it is needless to remind the reader, was introduced into America by the Spaniards. The tirst which were seen in the Argentine region were introduced by Don Pedro de Mendoza, who also brought cattle, goats, sheep-goats, and dogs. But hunger compelled the colonists to eat their stock before they got thoroughly naturalised. Alvar Nunez-better kuown as Cabeza de Vaca (Cow's Ifead)-has the honour of having introduced the progenitors of the present countless herds and droves which pasture over the great plains of the River Plate region. By neglect the horse has, however, greatly deteriorated in the Pampas; and though here and there a more thoughtful estanciero has done something to introduce better blood, yet throughout the greater part of the Republic there is among the native horsses little trace of the famous Andalusian steeds from which the "thousand horse-the wild and free "-undoubtedly sprang. The season of birth is unfavourable to the foals. They are produeed in the winter months, before the tender autumn grass is ready for them, and the mares, from insufficient nourishment, have but little milk; hut were g ter care taken in this matter-as in the United States-the result would soon be evident in the greatly increased and improved animals. The number of horses and mares in the Argentine Republic is about $3,960,331$, of a total value of $£ 3,520,435$. In the interior provinces the mule has almost taken the place of the horse in the Littoral regions, and great numbers are exported. The ass is, of course, also found in considerable numbers ( 266,927 ), and, with the mules ( 132,125 ), is extensively employed as a draught animal, a beast of burden, and even a saddle animal, albeit the breed of donkeys is rather poor. Next to sheep, eattle breeding is the great business of the Argentines. In no part of the world are there so many horned cattle, though butter, cheese, and milk are so scarce that not enough of the two former is made for the use of the cities, large sums being sent abroad to purchase what under proper management ought to be exported from most of the River Plate country.

The stock on a cattle estameia is often as many as 10,000 , divided into herds of 2,000 or 3,100 each, whieh two men can easily manage. In Buenos Ayres, Mr. Mulhall sets down the number of cattle at $6,000,000$, and in the ofticial statistics of the whole Republic they are given at $13,993,090$, representing a value of more than $\mathfrak{t 1 7 , 0 0 0 , 0 0 0}$. Formerly, cattle rearing was not considered profitable, though of late years views have changel on that question, since it has been fo 1 that, if properly attended, it will give. from twenty to thirty per cent. return on the enpital invested. In seasons of drought the cattle have to be watered by means of a bolde sin foudo, which raises water from s well, and is worked ly a man on horseback. It ean water 2, 0100 cattle in a day. Herds of eattle, from 1,000 uprards, ean be bought at from 16 s . to 2 s . per head. Land is now so high in the sheep-farming districts that the cattle estanciero must seek land, sometimes in disagreeable proximity to the Indian hamuts; hence, for this and other reasons, enttle re..ring is not mich in favour with foreign residents. "The rich estancieros," writes Ma:

Mulhall, " usually live in the eity, in great fashion and luxury, leaving therr establish. ments in charge of a 'major domo,' and going out once or twice in the year to see how things are going on. The 'gauchos' live in wretched 'ranchos,' of which the sides are plastered with mud, and the roof of 'paja,' or reeds that grow in the lagoons. The furniture consists of a wooden stool or bench, a few horses' or cows' heads that are used for seats, and a cow-hide stretched on stakes, which serves as the family bed. The eooking is done in the open air with an 'asador,' or spit, that is stuek in the ground. The most important piece of furniture is the 'recado,' or native saddle, vhlich is very complicated, and consists of trappings that often serve the 'gaucho' for his bed." Conld some method be devised of preparing beef for the English market, which would produce a

the "alameda," or chiey phomenade of mendoza, aboentine nejublic.*
palatable and therefore saleable article, the cattle trade of La Plata would inerease enormously. Hitherto, however, boiling down the beef for the manufacture of the meat "Extract," sun-drying, and salting, as well as collecting the tallow and the hides, are the main profits which an estanciero can see his way to obtain from his horned riches. Fat eattle

* Mendoza was founded 300 years ago, but the old city was destroyed by un carthquake in 1861, and the present one is built over its ruins. Previous to that terrible eatastronhe of the 20th March the town had a population of 15,000 , of whom probably not over 3,000 escaped. When the shock threw the city into ruins, most of the people were at vespers: hence the destruction of life was much greuter than it would have been on ordinary oceasions. Fires raged for eight days, and marauders from the surrounding comutry occupind themselves with plunder, instcad of rescuing the sinvivors from the ruins. Among those who perished was Bravard, the French goologist, who had predicted that before long tho place would be destroyed in this manner. so completo was the wreck that the very course of the strects could not be traced: even in Buenos Ayres, $\mathbf{7 0 0}$ miles distant, the shock was slightly felt. Under the shadows of the Andes, elose to the Unpallata Pase (p. 213), it was a favourito halting-place with trans-continental travellors before steamers wero established between Europo
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ग. 213), Europo
are purchased for consumption in the cities, or more frequently for the large salting establishments, or saladeros. In the first case the hides are stretched on seaffolding to dry. They are then despatched to the produce depôts, or barracas, where they are passed through a poisonous solution to preserve them from moths and worms, and then exported. Meantime the tallow and other spare grease is tried out in steam boilers, and then run off into half barrels or pipes for embarkation to a foreign market.


A stheet in menioza, AhoEntine heplhlic.
In the saladeros both cattle, sheep, and horses are killed. In some of the large ones-such as those at Barracas-as many as 10,000 corvs and mares have been slaughtered
and Chile, and in the old writers wo have pleasant idyllic pictures of the evenings on tho Alameda with Mendozina beautics, or praises of the magnifieent panorama in which Trequngato, with its eternal snows, forms so striking an object. However, few people, nowadays, cross the casy Cspallata Pass through the Andes into Chile. The strects of Mendoza are traversed by tho Zanjon, a canal drawn from the river Mendoza by the foresight of the old Indian inhabitants of this region prior to the conquest. Small aqueducts branch off from it in all directions for the water supply of the houses and gardens, except in the higher suburbs on the western side, where a reservoir is kept, from which supplies for domestic uses aro drawn. Mineral and thermal springs and baths aro some of the other attractions of this out-of-the-world Andean town (Mulhal).

In a day in the busy season. So smartly does the work go on, that in a few hours a comparatively small number of peons will slaughter, cut up, salt, and otherwise prepare 500 head of cattle. The meat is first cut up into thin strips, and piled in large heaps with salt. It is afterwards dried upon scaffolds, and is then known in commerce as carne tasajo. It is to an uneducated palate a by no means pleasant article of food; but in Brazil and Cuba, where it is used to feed the slaves, it finds a ready market. Charque dulce", the "jerked beef" of commerce, in which it has of late years been seen, is prepared by merely sun-drying the strips of Hesh. It makes, when properly cooked, a not untoothsome dish, and it is much more rutritious than the carne tasajo. In order to obtain the grease whole carcasis are thrown into the boilers, the bones and the fat being the only portions saved in this wastef al process. But nothing else can be done with the superfluous cattle, unless to boil them down for the preparation of the well-known extract. Even then a surplus of stock remains, the problem of utilising the beef of the River Plate provinces waiting yet to be solved, and certain it is that the lucky individual who can do so will reap no stinted reward for his skill. Mares are never used in this country as draught or saddle animals. Accordingly, they also are sent to the saluderos for the sake of their grease and their hides, the former being known in commerce as auinal oil, and the latter being highly esteemed as the raw material for carriage-leather. Sheep are also boiled down, but principally in the "grease foundries." The sheep is stripped of its skin, "and the whole carcase thrown into the grease-boiler, to procu:v the suet and grease. The cooked carcases serve afterwards for fuel, which is an improvement on the old method, when it was nothing extraordinary to fire the boilers with whole animals scarcely dead." The wool exported from the Argentine provinces is entirely unwashed, for there are no large establishments for cleaning it. It is firstafter being classified in the barracas-pressed into bundles weighing from seven to nine hundred pounds for convenient storage on shipboard. The sheepskins are in like manuer pressed into bales, and are almost all sent to France.

It is thus evident that the River Plate States are at present in the crude-almost hunter-condition of commerce. They export their wool and yet have no woollen-mills, for labour is too dear, and the population too scattered for them to be able to compete successfully with those of the United States, Canada, and Europe. Accordingly, the Argentines import their wool in the shape of cloth. They have, again, a superabundance of hides, and plenty of tamning materials, yet they send both out of their ports, to be brought back in the shape of leather. Salt could be exported from the River Plate; but for much the same reasons as those which have checked other manufactures, none is prepared in the country, and the saladeros import immense quantities from Spain. In the same way the other products of the country are, perhaps, necessarily inutilized, and must be ncglected for some time to come, if the Republic will insist on copying the vicious fiscal system of the United States by the imposition of "protective duties"-duties which have even seriously injured the United States, and will, of course, ruin a country like the Argentine Republic, where, in the words of Herr Napp, from whom we obtain the information condensed in the preceding pages, the only thing "wanting to progress is immigration-nlways immigration!"

## Monethis Matters.

The revenue of the Argentine Government for 1879 is caleulated at $16,860,000$ dollars, and the expenditure at $16,758,000$ dollars, all in gold, or "pesos fuertes," or "duros," a very different kind of currency, as we shatl presently see, from the paper-money in cireulation throughout the Republic of the Silver River. This, though a rather higher estimate than in any previous financial year, is, if capable of being carried out, a more hopeful oue; for, for long past, the income of the Argentine Confederation has been unequal to its expenditure. In 1sifi, indeed, the one was just abont double the other. The sources of revenue are chiefly import duties. Then come export and warehonse duties, stamps, telegraphs, post-office, railways, \&c., while war, and the' suppression of oceasional civil broils, next to the payment of interest on their delts-and they do pay -swallow more than one-lualf of the taxes. This is, however, only the Federal revenue, for every State has its own budget; that of Buenos Ayres alono dealing annually with more than one million poumls sterling. None of the Provinees, with the exeeption of Buenos Ayres, Entre Rios, and Santa F ', have any foreigu debts. The Republio has, however, not omitted to increase its difficulties in this favourite direetion. In 1870the latest return to which I havo necess, and I believe, that on the whole, it fairly represents the financial s/atus quo-the total foreign delt of the Argentines, was $42,31+, 253$ "hard" dollars-or $\mathfrak{E S}, 462$, s:00, while tho internal liabilities were $£ 3,997,509$, the interest on the foreign loans being paid in gold, though the home creditors have to accept theirs in paper. There is also a considerable floating debt in the shape of Treasury bills, loans made by the Provincial Bank, \&e., but, as a rule, it may be said that the Argentine finances are not in an unhealthy condition, thongh its system of raising a revenue is undoubtedly its weak point. Being almost wholly dependent on Custom Honse dues, it is liable to be affected by every commercial crisis, and fluetnates up and down aceording as the merchants import or export groods. This is, of course, the case more or less in every comntry; but in the Argentine Republic, where the jealonsy of the Provincial Governments prevent the National Treasury imposing any taxes on the country under their control, this is especially true, nor do we see that until some further revenue can be drawn from the State lands, or the relations of the Provincial (iovernments to the Feleral one is put on another footing, that there will ever be much alteration in the present state of affairs. There is-in a word-not much likelihood of the Treasury in Buenos Ayres getting in a good year a surplus sufficient to tide over a bad one. Accordingly, tl are is nothing for it but to seek another foreign loan, allow all development to be suddenly paralysed, or to become bankrupt, a contingency which, in the present state of affairs, does not seem very remote. Hitherto, however, Argertina has paid punctually, and though it does not do to $\omega$, too eonfident in such matters, it is pleasant to the historian of "embarrassed" States to eneounter some little variety in the stories of South American finance; national defaleation lecomes, after a time, sadly monotonons.

The Argentine Republic has really no money of a national character. In the Upper Provinces nearly all trarsactions are done in the depreciated Bolivian dollar, the value
of which fluetuates now on one side, now on the other, of three snillings; but though, for convenience sake, the putacon, or hard dollar, is taken as a monetary unit, yet it is a coin representing a fictitious value, and is, indeed, rarely seen in the country. At one time, some of the Provinces had mints; but, by the present constitution, they have no right to coin money. There must almost necessarily be foreign silver in circulation through the country, still further intensifying the confusion which prevails. In reality, however, most transactions are carried on in the papel moneda corriente, or paper money issued by the Bank of Buenos Ayres. The dollar, in this eurrency, is worth about twopence. In aldition to foreign eoins, the interior is, as we have seen, flooded with Bolivian dollars, as well as the notes of various provincial banks, which are generally in Bolivian

bidis of the chirch of sin domingo, mendoza, ahoentine hepublic.
valnes, with the exception of those of the National Bank, which only issues bills in hard dollars. The Buenos Ayres paper dollar is in reality the real money of the Argentine Republic, and of late has obtained more public conffidence on aceount of a bureau having been established, whereby it can be at all times exchanged at the rate of 25 pesos current for one hard dollar. Though now stationary at a value of about twopence, this was not always so. Fifty or sixty years ago, a dollar meant something over four shillings, as well on the sloores of the Plata as on the banks of the Hudson. But in an evil hour, the Buenos Ayres Bank became "nationalised," and got so under the control of the Government as to be compelled to grant almost any accommodation requircd. As the Buenos Ayres Ministry were always requiring accommodation, in time the resources of the bank were insufficient to meet the demand on it in good coin. Accordingly, the wants of the Government increasing, the bank began to increase its issues, until these reached an amount out of all proportion to its real capital. For a time, even this
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might have been got over, had not the Government interfered, and passed a law decharing the notes a legal tender for their nominal value, and relieving the bank of all obligation to pay them in specie on demand. The result of this was, noi aiuaturally, that the bank's credit dropped to the lowest ebb, and the notes became proportionately depreciated. In three years, between 1825 and 1828 , the dollar fell in value from 1 s .2 d . to 1 s. The war with Brazil terminated; but the dollar, in spite of a beroic effort to regain


A "diligence" Ahuivig in tile sirirnhs of mendota, argentine repiohic.
its former standing, suceeeded in reaehing only a precarious value of 2s. Left to itself, it again dwindled away down to (d., and then to $4 d$. , until, finally, its best friends began to think that the poor scrap of paper looked cheerful when it was quoted at $2 \frac{1}{2} \mathrm{~d}$. Still, the people were not content. On the Ameriean continent, North and South, there exists a strange idea that money is worth something more than what those who buy it as a convenient medium of barter ehoose to give for it. There is no " making money plentiful" or "cheap," and so, when in answer to a cry for "more money," the Government flooded the country with this inconvertable currency, it was perfeetly evident that the dollar could stand no more bleeding. When it got down to $1 \frac{1}{2} \mathrm{~d}$., it was conelnded that ly-
and-by the once respectuble representative of the banking credit of Buenos Ayres would ouly be worth the paper it was printed on, or the value which a not over fastidious collector might attach to the autograph of the cashier of the National Bank. Another evil consisted in the continual fluctuations in the price of gold which this caused. Of course, it happened that when paper went down gold went up, as we were so long familiar with in the case of "greenbacks" in the United States. Legitimate commeree was, therefore, often at a standstill, and the merchants were compelled, for want of anything better to do, to rub shoulders in the Bolsa with the crowds of gamblers who wero speculating in "ounces" or doubloons. "How are ounces?" used to be a common question, when oneman met another in Buenos Ayres.* To put an end, if possible, to these mischievous fluctuations, Congress passed a law in 1875, the tendency of which will be to make monoy more stable, by issuing a coinage of determinate value. Its actual operations are, however, still in the far future, and the "peso fuerto" will for long be only known on paper, and in accounts intended for foreign perusal.

There is an Argentine standing army-small, though disproportionately great to the number of the people-a militia and a national guard, which probably contains within its midst ns choice a collection of desperadoes as the world could desire not to make the acquaintnee of. The Confederation has also over twenty steamers, including two ironclads, mamed ly upwards of 3,000 officers, sailors, artillerymen, and marines. Of late years, the Argentine Republic has not been importing so much as it did; while the exports-chiefly wool, tallow, and hides-are increasing. Most of the trade is with France and Great Britain, Britain sending in return for the Argentine staples cotton, woollons, and iron. Railways are gradually extending over the country, revolutionising the entire political and commercial habits of the people, though many years must elapse ere cominunications of the kind can reach the remoter districts. But, until this is the case, the Argentine Republic will not be fully developed, nor its great pampas peopled with the millions of men, cattle, and sheep they are capable of supporting.

The Argentine Republic, with the exception of the mining districts on the northwest of the Republic, on the Bolivian frontier, the agricultural district of Chivileoy, in the north of the province of Buenos Ayres, and the Welsh settlements in northern Patagonia, is essentially a pastoral country. Indeed, it has been doubted whether the Pampas are fitted for tillage. This question we shall allude to more particularly. Meantime, the land, except in the remoter parts of the country, is occupied by the necessitics of the great cattle and sheep runs, and the new comers must seek remote, though probably-as far as the pastoral capabilities of the country are concerned-even better localities than those now taken up. Unfortunately, however, over much of that country the Indians still lord it, or threaten to do so, to such an extent as to practically make it a tabooed land to those who value life, limb, and property. Except a comparatively small narrow nesk of land separating the Chaco Indinns from those of the Pampas, these wild people roam over all the grent plains of Patagonia through the Chaco into Paraguay and Bolivia: Indeed, in the neighbourhood of Frayle Muerto, or Belleville, many

[^79] stidions Another $f$ course, iar with herefore, etter to ating in hen one chievous to make perations known $t$ to the ithin its nake the ronclads, ears, the fly wool, Britain, Railways nd comis of the Republic of men, e northileoy, in northern ther the ticularly. by the remote, ed-even of that lly make aratively as, these Paraguay many

Englishmen who est.blished themselves as cattle farmers have been foreed to turn their attention to sheep and agrienlture, as offering less indncement to the Indian marauders. North of Frayle Muerto, Switzers, Germans, Frenchmen, Itulians, Englishmen, and AngloAmericans are gradually establishing themselves, in spite of the raids of the Indians, and the even more futal ruvages of loensts. The Chaeo tribes, before the arrival of the Spaniards, to some extent supported themselves by agriculture, and were not so nomarlic as those farther to the south; yet, at the present date, they are among the most intractable aborigines of the American continent. The Pampas Indians are less ungovernable, for they submit to their chiefs, and determine their poliey in accordance with the dietntes of their ruler; yet, for years the region between the Indian country and the settled portions of Buenos Ayres has been the seene of eontinual bloodshed, the very discipline of the Pampas Indians enabling them to unito in considerable armies, and thus more - effectually harass the unfortunate estancieros. The relations of the Argentine Govermment with the Indians havo been most deplorable; while the surroundings of the Gaucho, or Argentine peasant, is shih as to make him sometimes as dangerous to his white neighbours and his fellow citizens as the Indiuns. "He has," writes Mr. Frank Parish, "been constantly subject to conseription for service in the army engaged in foreign or civil wars, leaving in the frontier districts his home defenceless aguinst the depredations of the savages. It is true that the Ganchos may be said to be the primary canse of the civil wars which have devastated the country, for, despising-or at least not appreciating-their constitutional influenee, they have been accustomed to regard war as a normal means of subsistence, and to be used as such for its own sake. Nevertheless, in face of the peculiar hardship of the condition of these men, even though in tho aggregate selfinflieted, it is scarecly surprising that immigrants are oceasionally subjected to annoyances :and dangers through a spirit of hostility engendered by feelings of envy, as the Gaucho is subjected to the conscription, whilst the foreigner is undisturbed in his industrial -oceupations. Families have fallen victims to the sudden outburst of animosity on the part of the Gauchos, who, when once roused, have been as cruel as the Indians; and though the arguments which have been pleaded in extenuation for the latter cannot be applied to the former, their eondition is a practical evil, and enlightened legislation for these frontier districts is one of the urgent necessities of the country." The Paraguayan war, and the civil broil with the province of Entre Rios, exhausted the Government resources, so that the frontier line of defences against the Indians was left almost undefended. The Pampas tribes, accustomed to seour the country in search of game, took advantage of this state of matters to attack the eivilised distriets, in order to supply themselves with the necessities whieh, owing to their improvident mode of life and the absence of agricultural pursuits among them, they found themselves in want of. Still the English sheep farmers of the Sierra Veutana slopes hold their own, in the midst of the Indian eountry, by dint of tact, Suider rifles, and the greater attractions which the eattle runs of the north have for the brown horsemen. On the Rio Negro, English settlers grew excellent crops; but south of this, Patagonia, as a whole, deserves the description which Guerara-as quoted by Mr. Parish-erroneously gives to all the region soutn of the River Plate: "a barren land, without timber for building without
firewood, witheut water, without soil to receive seed, and without anything that a city requires for its maintenance." Yet, as we shall see, this country is not so entirely unsuited to the wants of civilised men, for on the banks of the Chupat River a Welsh colony established itself in 1865, and is prospering in a quiet subdued way, though at first the settlers suffered terrible hardships, and had to be succoured by the Argentine Government. It may; however, lee added that so far from the Patagonians injuring them, the colonists would have absolutely died for want of food had not the Tehuelche Indians out of their generosity supplied their needs. Finally, to enumerate the outprsts of the Argentine Republie, at Santa Cruz River there is a military establish. ment, whieh at a later date in our literary travels we shall pass on our way south, before we double Cape Horn and the Land of Fire.

## CHAPTER XV.

## The Pampas: Men and Manners.

The student who would see the mer: and manners of the Argentine Republic must not seek them in rities. Towns all the world over are apt to be ths same. The men and women in them conform to the conventionalites of "society;" and "society;" from China to Peru, is tyraunised by the dieta of the tailor, the mantua-maker, and the dancing-master. As years roll on, the etiquette of one city approaehes that of another still older, and all of them eventually take their inspirations from Paris as the capital of polite people, grod cooks, and makers of civilised raiment. In eities also congregate foreigners who keep up the customs of their own countries, but take something from, and give something to, the natives of the country and the other foreigners by whom they are surrounded. In cities, likewise, there is a want of individuality. The people cease to a great extent to think for themselves, and do, not what is good in their own eyes, but in the eyes of their neighbours. They take their ideas of right and wrong from somebody else, just as they aceept their politics from the newspaper which they read. In the country it is generally different, and the less thickly peopled the region the greater is the individuality, eccentricity, or by whatever other name, peculiarity of manner, originality of ideas, and a general roundness in men and their surroundings, are called. This is a marked characteristic of the true American. The people of the United States owe much of their peculiarities to several facts. In the first place the original settlers were necessarily men of enterprise, boldness of invention, and individuality of thought. In the struggle with nature, the survival of the fittest is the usual law: the strongest succeed, and the weakest go to the wall. These qualities were in the United States intensiifed by the life of the early settlers, and were of course transmitted to their descendants. Their fathers, the Puritans, had a brave but dangerous habit of speakingout their minds, and of laying their legs over a $\log$ in the backwoods as they spoke it. Their descendants in New England have got over the log cabin stage of existence, but are entirely a Welsh aough at argentine injuring chuelche rate the establish. y south, nust not he men society,' and the ther still of polite scigners nd give hey are ase to a , but in omebody In the eater is iginality his is a e much :s were ht. In trongest States to their peaking noke it. but are
eaually ready to assert their opinions regardless of whomsocver they may please or offend. Long-transmitted habits tell. Hence-it must be true, since the stage is the mirror held $w p$ to nature-the typical "Yankee" of the drama puts his heels on the chimneypiece, or reclines them gracefully on the top of the stove, as be charges the poker or the handle of the beil, just as his fathers did the same by a pine $\log$ and a fir cone. The sons of the Cavaliers in Virginia in like manner inherit many of the best and worst


LNDLAN: OF TIIE GU.IN CIICO WATCHING THE PInST BTEAMEL ON TIE VERMEJO.
qualities of their forefathers. "Kentish Sir Byng, who stood up for the king," was a gentleman of chivalric sentiments, according to his way of thinking, but being also an assiduous waiter on fortune at the gaming-table, fell under the rapier of another gentleman of the same type, and left his younger sons penniless, and all his daughters portionless. The girls came to court, and may be seen in Charles', or James', or William's Pieture Galleries at Hampton or St. James', and the boys vent to grow good tobacco on His Majesty's plantations in the commonwealth of Virginia. But they did not cast off their old habits with their country. Their genealogical tree was carefully cultivated, and the Byngs of Virginia were particularly careful to let all the world know that they were of the same
"good old stock" as the Byngs of Kent, whose grandsire fought at Naseby and Marston Moor. In all the British Empire there were no such Tories as the Virginians, or Marylanders, and up to one fatal day, something over 100 years ago, "the king" had not more loyal subjects in London or Liverpool than in Baltimore or Williamsburg. Still, that did not prevent the latter from flocking to General Washington's standard, in 1776, just as the same hot-headed gentlemen found it quite in keeping with their new allegiance to ride to Bull Run with General Lee in 1861. They gambled away their rice-fields, as their fathers had hazarded their hop-gardens, on the throw of a die, and they fought duels with bowie knives and revolvers in Virginia, just as their ancestors had "asserted their honour" in England by killing each other with rapier and wheel-lock dag. But nowadays no man would expect to find the idiosyncrasies of the Virginians exhibited in cities. It is on the banks of the James River, or in the Roaioake Valley, where the student of atavism or its allied doetrines would have a chance of finding facts in support of his theory. The people of the Western States are again even more "original" than those of New England, for the simple reason that in the Western States, where the tradition is that the settler, not fond of neighbours, moved in the spring because "two strangers had been seen in one Fall," the country is, as a rule, thinly penpled, and men have, perforee, to think and aet for themselves. Moreover, the narrowness-original and aequired-of the New Englander and Southerner, have, among the Western men, been purged by the influx of Teutons and Scandinavians, and by many tussles with Madame Fortune, and what an old French chronicler calls "Monsieur le Sauvage." The result of this is that they are not awed by "authority," nor by the eternal reading of and hearing other men's ex-cathedra "views," do they, like ordinary people in their condition of mental life, in time cease to have the power or the inclination to think for themselves. And-what this long parenthesis is intended to lead up to-so it is in the wild Pampas of the South. There, life is more primitive than in even the smallest village of the Argentine Republic, and though it is just possible that the Argentines might not be inelined to take the Gaucho as the type of his nationality, he is quite as much the apotheosis of the La Platan as John Bull is of the Englishman. This brief sketch would therefore be culpably imperfect without a few words about the Gaucho and the Gaucho's home. First, however, let us take a ride into the Pampas.

## The Pampas: Their Physical Characteristics.

In familiar parlance, geographers speak of the plains of Patagonia, the Pampas, and the Chaco, but in reality they have no very definite natural boundaries. As Mr. Frank Parish points out, the two latter extending, respectively, across the central and north-east parts of the country are in fact the same continuous formation in which a slight undulation divides the str rms of the Chaco, which join the Parana from those of the Pampas, which flow, either into the Atlantic, south of the latter river, disappear by absorption into the soil, or evaporate as they spread over the plains. The underlying formation of the best of these plains is a deposit of earth, which seems to have been "seoured away from the Andes and the highlands of the central parts of the continent," and is overlaid by three or four feet of rich mould, formed by the constant decay of the luxurious vegetation
which grows on the surface of it. The worst parts of the western Pampas, and the greater part of Patagonia, is composed of coarse detritus and gravel from the Andes, and requires irrigation before it can become even moderately fertile. There are other portions of these plains which are mere saline or brackish marshes, or dry, salt-white wastes, evidences of the former position of an island sea, when the country was lower than it is at present. Mr. Charles Darwin, whose early researches in this region forty years ago laid the foundation of his fame, and yet form our best guide to the geology of the Pampas,* indeed brings forward proofs almost positive to show that the plains of Patagonia and the Pampas have been gradually upheaved 400 feet in the southern part of the former, and 100 feet in the latter district. At one time the Paeific and Atlantic Oceans were in all likelihood comnected through what is now the basin of the Sinta Cruz River, in latitude $50^{\circ} \mathrm{S}$. "The latter district," writes Mr. Parish, "appears to have been upheaved at least 1,400 feet before ihe period of the gradual upheaval above mentioned, as indieated by the present position of gigantic boulders, which have been transported on icebergs sixty or seventy miles from the present rock. The enormons layers of gravel and sand on the plains, and even on the hills of Eastern Patagonia, give evidence of its having at one time formed the bed of an ocean which rolled against the Andes or intervening ranges of mountains." Thus the characteristic gravel formation of Patagonia is explained, while, according to Mr. Darwin, the earth of the Pampas, which now extends to the south-west and north-west of the estuary of the Plata, over an area of at least 750 miles long and 400 miles broad, to the thickness of from thirty to forty feet, was originally deposited as silt or sand by that river, the estuary of which has been continually changing its position, owing to the elevation of the land. It is more than likely that in time the Strits of Magellan will become a sandy valley, though a railroad or some better mode of communication will, in the far future, connect the Atlantic and Pacific Oceans. The word "Pampa" signifies, in the Quichua tongue, $\dagger$ a " valley" or "plain." The Pampas may be roughly described as the prairies of South America, though in Peru it is a term applied to designate any tract of level land no matter where found, and in this sense is transformed into bamba, a component of many Peruvian geographical names. The true Pampas are, however, those we are now describing, and which are calculated in round numbers to contain an area of about $1,500,000$ square miles, varying in quality from the waterless strips of desert called traversias, clothed only with a few boulders, to the more fertile ones lying on the slopes of the Cordillera. All of them, however, from the rapid alternation from moisture to parching drought which they undergo, are incapable of supporting trees, and are aceordingly covered with, among other gramineæ, the luxuriant Pampas grass (Gyneriunz argentenm), in tufts six to eight feet high, $\ddagger$ and other herbaceous plants, and by sparse groups of stunted bushes. The sterile Pampa has a peenliar vegetation, cousisting for the most part of "hard plants with long thorns;" but in the fertile Pampa, the rich grasses which, during, at least, a portion of the year-as in the province

[^80]of Buenos Ayres-carpet it, supply abundance of food for stock. Trees, unless where planted, are, as we have already indicated, entirely wanting; but along the shores of the streams and great rivers are found occasional clumps of a species of willow-the Salix Humboldtiana. Numbers of lakelets occur, but as the supply of water in them depends upon rainfall, they are alternately filled and empty, acenrding to th? season. The soil is much the same in the provinces of Buenos Ayres, the southern half of Santa Fé, and Cordoba, and the northern part of the great Patagonian plains to Bahia Blanca. Then, according to the notes of Mr. Napp, the sterile Pampas show themselves to the west and north-west, and on the north-east begins the Grand Chaco, which alone of the Argentine plains is possessed of any forest growth, or monte.* In the provinces of Corrientes and Entre Rios there are also plains of some extent, but the country is chiefly billy and rolling, and is more like the southern part of Brazil and Uruguay than any part of the Argentine Republic. There are no pampas whatever, and instead of rocks, grass-lands, and sterile plains, the broken country is covered with a thick sod, while fine forests shade the valleys and the banks of the great rivers, fed by the gathered waters of the Andes, Snuthern Brazil, the Grand Chaco, and the numberless streams which rise in the centre of this Argentine Mesopotamia, lying between the rivers Parana and Uruguay.

After the pictures which Darwin and Head have painted of the Pampas, it would be courting failure to attempt covering the same canvas. It will, however, serve our purpose sufficiently well if we select from our notes a few particulars of the Pampas as they exist in the province of Buenos Ayres-perhaps as favourable a type of them as could be chosen. "The general appearance of the country is that of a vast plain, covered with grass or 'thistles,' and almost destitute of trees." In a few words this deseription of Mr. Mulhall will give a fair idea of the appearance of these pasture-lands of the South. There are a number of arroyas, or water-courses, which have their origin in cañallas, or swamps, but they frequently dry up in the summer. With the exception of Del Medio, Arrecifes, Areco, Lujan in the north, and the Salalo, Colorado, and Rio Negro in the south, the Pampas have no permanent running waters. Still further south is the Chupat, but this is properly a Patagonian river, while the Rio Negro is the Indian frontier-line southward. All this region is familiarly known as "the camp," from the Spanish word campos (field). In Buenos Ayres people talk of So-and-So living "in the camp," or of such a like place being a mere "camp town." The word "camp" thus corresponds to the Australian "bush" or the Indian "mofussil." The northern part is high, but so exposed to drought that in 1859 over a million horned cattle perished. The southern part is, on the contrary, low, and in consequence suffers in the wet season. As a rule, the soil is rich, and produces good crops of natural grasses. The climate is healthy, a fact self-evident to any one who looks at the robust estancieros, native and foreign, who pass their life "in the camp." "The spring is the pleasantest season. As summer approaches the heat becomes excessive. The thistles, which before looked like a crop of turnips, suddenly spring up to a beight of ten or eleven feet, armed with strong prickles, forming dense jungles, impenetrable to man or beast. The appearance of the country undergoes a

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a scene in the pampas fhowing the pampas railroad, rheas, alpacas, and biscachas).
complete change in tha course of a week or two. Abont Christmas (Midsummer) the thistles are all in fuil bloom, and soon droop and die. Tropical rains fall in winter, and the carth turns green again. Snow may not be seen for a generation, but ice is not uncommon, and the wind is often piercingly cold." A " pampero" is, indeed, a wind to be remembered, but to the citizens of the town of "Good Airs"-which has sadly belied the title given to it by the enthusiastic founders-look upon this breeze as bringing health and vigour to their jaded bodies. It is a famous wind-a Southern Euroclydon-of much the same type as the Texan "Norther," whose acquaintance we have already made (Vol. II., p. 143).

## The Vegetation of the Pampas.

The botanist has not a very fruitful field on the Pampas. The "social plants," such as grasses, diminish the diversity of species, though the plants which are found are exactly those most suitable to the wants of the men and animals who have made their homes in the Pampas. There are also a number of introduced plants, which have in some districts taken possession of the country, to the destruction of the original vegetation. Among these may be mentioned the burr, the Cynara Curlluucnlus (the "thistle" so-called, in reality the cardoon), the fennel, the hemlock, and numbers of others. But of all plants grasses are those best represented on the Pampas. These, however, do not form the dense compact sod which is so characteristic of old pastures in Europe. "Instead," writes Professor Lorentz, "there are coarse and scattered tufts of hard and dry grasses, which cover the yellow clay like thousands of little islunds; the genera Stipa and Melica principally furnish the species. At the place where their formation is most pronounced, the earth is cracked between the tufts, and is often washed away by the rains, so that the grasses are left as little eminences, the interstices sometimes being filled up with smaller species. At a distance these grasses have the appearance of a compact sward, and thus the Pampa appears like a lawn of a very varied colour, according to the season-black as coal in the spring, when the dry grass of the previons year has been burnt; bluish and clear green when the young leaves begin to grow; a little later brownish-green-the colour of the adult plant; and finally white as silver when the seeds ripen. Thus it is easy to imagine yourself in an occan of liquid and undulating silver." The southern Pampa more rescmbles a plain than that of the north, which is undulating. The tufts of grass are thicker, and more resemble a sod; their colour, according to Messrs. Heusser and Claraz, who have investigated the Pampas flora, is a purer and fresher green. The Composita (dandelion and daisy order) are, next to grasses, the plants most abundautly represented on the Pampas, though the species are not showy, while vervaius, mallows, the purslane order, and leguminous plants, and-on the borders of the swamps-reeds and a large Eryaginm (Sea Holly), eke out the limited vegetation of the region. The soil is, in certain localities, well enough fitted for trees, and the elimate in sufficiently sheltered places does not rebel against them. But they neither grow here nor on the North American prairies, where the circumstances seem also not prejudicial to their growth. But in a great pasture-ground trees are not in favour, and as the cooks lave strong conservative
f) the r , and is not ind to belied health 11-of made
instincts in favour of using argols, or the droppings of cattle for fuel, the motive power to the growth of trees is wanting. Peach-trees, grapes and figs, apples, and pears, however, Hourish in some localities, while near the towns or villages the Eincolyptus Robinia (fialse acacia), Paradise tree, and Lombardy poplar have been cultivated with case, in spite of the armies of ants which prey on them. The ombu (Pircunit dirict) is the treo most in favour, on account of its cool, refreshing shade, and for the landmark which its strange appearance supplies. The "pita," or flowery aloe, forms the usual fence in the suburban country seats. It grows to a height of thirty feet, and the leaves being seven or eight feet long, and five or six inches in thickness, forms a fence which before now has proved impenetrable even to Indian assaults.

The Pampa has changed its aspect owing to the browsing of sheep, the hard, long coarse grass-tufts, or pasto-luro, disappearing and being replaced by the compact, tender, and shorter herbage known as pusto-blantlo. Thus between Buenos Ayres and the River Salado the Pampa has totally changed its character. It is the general opinion that this is owing to the impoverishment of the soil, though most likely this change is simply owing to the fact that the fine herbage is no longer choked by the long coarse grass, which the cattle have cropped, and accordingly springs up as the sun and air reaches it. The pasto-duro is, however, absolutely necessary for feeding cattle and horses during the winter (p. 233).

## The Animals of tie Pampa.

Among the principal Pampean animals is the biseaeha, or viscacha (Lagostomus tricholuclylns), which is to the Pampas what the prairie dog is to the prairies of the north. They are hated by the farmer, as they burrow the land in all directions, and accordingly there is much dangur in travelling on the plains, especially after dark, from the horse stumbling into one of the biscacha holes (p. 233). The armadillos are well represented in the Pampas, no less than three belonging to the genus Dasypus being found there, while others exist in different regions of the Republic. The common one, the "peludo" of the natives, is found all over the country. It burrows in the ground, but does not leave an opening easily discernible belind it. The natives regard it as one of the dainticst of dishes, and look upon that day as not lost in which they can serve up a peludo roasted in its shell, instead of the wearisome beef and mutton, whieh on ordinary oceasions form their dietary staple. The mulita, or piche (Praopus hybridus), another species of armadillo, has such powerful claws that if it once gets its head underground, it is impossible to pull it out. The Pampa hare, a species of cavy, or guinca-pig (Dolychotis Patagonica), is found in the south-eastern region, as well as in Patagonia, while the concjo, or "rabbit" (Curia leucopyga), is a common pest of the estancia gardens. Wild dogs at one time used to roam about the country in packs, like wolves, doing an immense amount of harm to the flocks, but of late years they have got tolerably well thinned off. The beautiful Argentine skunk (IMephitis Patagonicu), the comadreja, or "wensel," but which in reality is a species of opossum (Dilelphis Azare), fond of sucking eggs, various species of rats and mice, "nutrias," polecats, deer, and tiger cats, may be mentioned among the other mammals of the

Pampas. The Cui, or so-ealled nutrias (Myopotrumus col/pus), furnish furs, while the tiger-eats are not common here, though in the beautiful islands of the Parman they are much more frequent. Here, amid the dense vegetation which eomes down to the water's
 its enemies the puma ( $F_{r}$ lis comedor) and jaguar (Frlis merri), besides serpents in abundance. Here are also found those numberless orange and peach groves, which supply Buenos Ayres with fuel and early fruit. When the river is high, it is no very uncommon circumstance to see the whole surface of the Ngean-like archipelago covered with the dibris of these mud-formed islands, buoyed up by matted roots, and carrying freights of serpents, pumas, and even jaguars, down as far as Buenos Ayres.* Sir Woodbine Parish, indeed, mentions a case of four jaguars having in this mamer been carried the whole way to Montevideo, where they landel, to the horror and astonishment of the inhabitants.

The Pampas swarm with dueks, partridges, and a species of homed plover, called, from the noise it makes, terotern (I'unellus C'ingnuensis). When the estaneiero hears at night its cry of "Ter-o-tero," he knows there is something stirring, and springs to his horse immediately. From a eulinary point of view it is extremely tough eating. The large partridge-ar perdiz gramle-affords fine sport, especially when flushed with a pointer, otherwise it either lies still or runs before the sportsman hidden in the long grass, insteal of rising. Mr. Parish Robertson grows enthusiastie over this sport. "Of all the shooting I ever saw, grouse, woodeock, pheasant, blackeock, partridge, snipe, ptarmigan, there is none equalling in intensity of delight and excitement the large South American partridge. His seent is so strong, that from the moment your dog comes upon it the agitation of his frame is almost hysterical. The birl before he will rise runs at a prodigious rate, and if your dog is coursing upon him, as an English dog does when he has traced a covey, you stop or lie down, you would never get a shot. The bird is off the moment his quick ears, or natural instinct, has told him his pursuers are near; not off by flight, but ly a rom which commences in suspense and fear, and terminates in absolute precipitation. So that for the chance of shooting your bird you are obligel to enconrage your dog to go upon him, to follow up yourself the game with unremitting alaerity, and to pay with palpitating satisfaction, after, perhaps, a ten minutes' run, for the achievement of bringing down the goolly prize you have so breathlessly pursued." $\dagger$ The thorongh-paeed equestrian inhahitants of the Pampas, however, pursue the partridge on horseback. They affeet to know that it will rise only three times. Accordingly, as soon as one of the birds is flushed, it is pmrsued on horseback with dogs. "Every eye is strained till the bird is marked down. When they come up to him the same process is repeated ; again he is marked down for the third time. Swifter and swifter is the ehase, and they run into the victim, who surrenders at diseretion, and gets little mercy." There is also on the Pampas a hawk which peeks out the lambs' cyes, and another, the "earancho" (Polyborns valgaris), which acts as seavenger to the garbage which accumulates around every estancia, and, of course, the great hird of Argentine, as of all the neighbouring regions, is the condor (Fullur grypluss), but it is never seen away from the high mountains, over

[^82] mmon In the lits of 'arish, whole , from night horse large inter, nstead ootingr there ericin it the at : when ird is near ; inates bliged itting rim, cl." $\dagger$ ridge $y$, as eye rocess hase, There cho" round pions, over
which it may be seen soaring in solitary aërial empire. In the Sierra the condor "hunter" is a welcome visitor, for the birds swoop down upon the young cattle, and immediately tear out their tongues, so as to prevent them giving alarm. The preliminaries to the sport of condor shooting is to kill an old mare, or other large animal, in the vicinity


THE SOUTH AM HLCAN KHEA, OH ONTHICH (Ehen dme.icand.
of its haunts, and salt it well, so as to prevent the bird disgorging the carrion when alarmed. Otleerwise, led by instinct, it will immediately throw this stomach ballast overboard, when it diseovers that the load prevents it soaring out of the reach of the "hunter's" bullets. One species of parrakeet, the catita (Conurus murinus), may be seen in numerous flocks, morning and evening, flying over the eity of Cordoba, going and retiring to the high land, where they live in society in great nests. In the Sierras they are extremely abundant, and destructive to crops. Mr. White tells us that
on each patch of ground, where wheat or maize is cultivated, a boy is stationel to frighten them off by shouting; "and this being continued the length of the valley, some leagnes, the effect of the chorus of scareerows is very curious. The birds, however, we a mateh for their tormentors; for, gliding down to the bottom of the stem, they bite that through, when the stalk falls, and so, unseen, they leisurely consume the grain. In winter they live mostly in the woods, and feed on the kernels of wild fruits that strew the ground in rich abundance. They breed in holes in the cliffs along the banks of tha rivers; four or five eggs are usually found in one nest, whieh is at the extremity of the hole, about two or even three yards deep. The young birds are justly esteemed a great delicaey, yielding a dish not unlike ronst sucking-pig. Walking down to the eliffs in the breeding season is hazardous, as the birds in myraids wheel romul your head and deafen you with their shrill screams; still more perilous is the attempt to sack their nests, which must be done by dangling in the air from a rope over a eliff 400 feet ligh. Eagles, too, like the flavour of parrot; for, casting the eye upwarls, there sits his watchful majesty on a projeeting pinnaele, ready to pounce upon any unfortunate stray bird."

The pica flores, or humming-birds, flit about from flower to flower, looking at first sight, to the inexperienced eye, like green and gold butterflies. $\boldsymbol{\Lambda}$ little ground owl, ealled leehuza (Noctua cunienlaria), commonly lives in the mouth of the biseacha holes, just as in North Ameriea one is found in the burrows of the prairiedog (Vol. II., pp. H1, 46). The "hornero," or oven-bird (horno, or oven), builds its nest of mud on the forks of a tree. It is a species of F'uruarius ( $F$. ruf ${ }^{\prime} u s$ ), though another species ( $l$. fuliginosus) inhabits the Falkland Is'ands. Its nest is large and dome-shaped, with a small entrance on one side, so as to have a resemblance to a rude oven. It is composed of clay, grass, \&e., well plastered together, and is divided into two compartments, in one of which is the nest proper with the eggs, while the other is reserved for the use of the male, who also assists in the construction of the family dwelling. The rhea, or ostrich (Rhea Anuericana), may be often seen in great flocks, crossing over the interior plaius (pp. 233, 237). Sometimes, heedless of the sereamings of the Pampa engine, these birds will continue quietly feeding as the train approaches. A moment more, and the line is strewed with their bleeding and mangled bodies. Mr. White repeats an amusing bit of bunters' gossip which may be possibly true, and is, at all events, a good illustration of one habit of the bird:-A Chilian sportsman, unaccustomed to ostriches, went out rhea-hunting with dogs, and suceeeded in catcling one. In high glee at his suceess, he proceeded to lash its wings with his leather girdle to prevent its flying (1) away. Thereupon down he sat to contemplate his capture and enjoy the usual whiff. The cigaretto is made up, the match-box opened, the light ready to be struck, when, happening to lift his dreamy eyes, he beholds to his dismay the rhea airing her fleet heels on the horizon, and what is worse than all, carrying off with her his magnifieent silver belt.

Numbers of snakes and other reptiles haunt the Pampa. Some of these are poisonous, others quite harmless. Among the former is the "vivora de la eruz" (Trigonocephalus alternatus), so called from the cross-shaped marking on its head. Among the latter may be mentioned the batrachian called "escuerzo" (Ceratophirys ornata), which

Mr. Mulhall, following native opinion, styles "a deadly kind of toad." In reality, it is "quite harmless."* It is not, however, the modern, but the ancient "fauna" of the Pampas which is most interesting. Buried in its soil are the skeletons of old animals, which in former days lived there. They are all different from the present species; but, curiously enough, are their close relations, though on a more gigintic seule. For instance, in what are known to the geologists as post-pliocene times, there must have lived in these regions gigantic sloths and armadillos, just as South Ameriea is at the present day the metropolis of sloths and armadillos of smaller size. The most fumous of these was the Megatherium Curieri ( p .240 ), a colossal sloth which attained a length of from twelve to eighteen feet, with bones more massive than those of the elephant. Its teeth show that it must have been herbivorous; but, from the enornous weight of its body, it is certain that it could not, like its modern allies, the sloths, have climbed back downward among the trees, even had there been in its haments trees to elimb. Professor Owen long ago showed that it must have lived upon the folinge of trees or slurubs, but with this difference, that instead of climbing amongst them, it aetually uprooted the tree bodily. It sat, most likely, upon its haunehes and mighty tail, as on a tripod, and then, grasping the trunk with its powerful arms, either wrenched it up by the roots, or broke it short off above the ground. The Mylolon was another of these great ground sloths. The Glyptorlon and Sehistopleurum (p. 241) were, on the other hand, gigantic armadillos, but differed from all modern armadillos in having no bands in their armour, so that they must have been unable to roll themselves up. While no armadillo of our day has ever been found much over three feet in length, and most of them are :nceh smaller, the Glytodon elavipes must have been more than nine fect long. The head is also covered by a helmet of bony plates, and the trunk was defended by an armour of "almost hexagonal bony pieces united by sutures, and exhibiting special patterns in each species. The tail was also defended by a similar armour, and the vertebra were mostly fused togrether so as to form a cylindrical bony rod." $\dagger$ At the time these old denizens of the New World lived, the site of the Pampas seem to have been occupied by the sea. Along the bottom of this shallow ocean the waters of the La Plata spread ont a layer of red mud, derived from the wearing away of the granites and porphyries of t're Andes and Brazilian Sierras, and in this mud were entombed the carcases of the great sloths and armadillos, whieh fell into the river, as it flowed through the primmal forests of the north and west. So numerous were they, that it is almost impossible to dig a trench through any portion of the Pampas without finding some of their remains. In the eaves of Brazil are also found true ant-eaters, armadillos, and sloths, many of gigmic size, but none of identical species with those which are now found living on the earth.

## Lafe in the: Cantr.

We have already noted some particulars abont stock-keeping on the Pampas. As hundreds of linglishmen are year alter year seeking a home in these regions, let us devote

[^83]a few lines more to this sulbjeet, drawing our facts from the ollicinal aceount of the Republic, which was compiled for the use uf the Centrul Argentine Commission nt the Centenary Wxhibition at lhiladelphia, and which doemment we have ulready more than once groted. This estimate, it may be alded, is lased upon the state of mutters in the province of Bnenes Ayres, where the breeding of eattle is better muderstood, mad where the Pumpu is higher in value than elsewhere, mad demands a larger capital. The render can therefore be certain that $n o$ more, at least, will be required in other purts of the Republic. A square lengue-that is, 6,500 Eaglish acres-of pasture land ensts, necording to its distance from the city of Buenos Ayres, from :20,000 to 50,000 c.ollars in grold. This sum alse includer

the neeessary buildings, whieh are usually of a very primitive deseription. Taking the purchase-money at 40,000 dollars, and the capital to be devoted to the purchase of stock at 20,000 dollars, the following is the way the money would require to be laid out : -


The first year of the plaee would proluce the following returns: $-2,500$ sheep sold to the "grease foundries" wonld bring 5,000 dollars; 1,000 sheep al corte, 1,200 dollars; 150 horned eattle for the butcher, 2,100 dollars; 100 al corte, 600 dollars; 25 mares, 100
dollars ; in all, 0,000 dollars, as augmentation and profit for the year. To this may be ndded $4,000 \mathrm{lbs}$. weight of wool at 4,800 dollars, and 300 lbs of hair at 60 dollars, bringing the gross proceeds of the estancia up to 13,860 dollars. From this sum must be dedueted 240 dollars for the pay of a manager, wages of two servauts at 250 dollars, six shepherds at 1,020 dollars, and sundry expenses 320 dollars; in all 1,560 dollars. Thus the profits on the capital expended is 20 per cent. per annum, though, indeed, some estancias yield an income of 25 , and even 35 per cent. Food for the employis: on an estancia really costs nothing. The animals on the place furnish abundance of butchers' meat, the chief

the schistopleurum.
aliment of the labourers, and the sale of the skins, hides, tallow, and grease of the animals slaughtered amply pay all other expenses. Hence the business of an estanciero in the Argentine Republie is not only profitable, but affords to a man who is willing during the first years of his life "in camp" to endure some privation, a means of aequiring wealth rapidly, without much care or attention on his own part to the aetual toil of the place. When to this is taken into acoount the fact that the value of land is rising in Buenos Ayres provinee at least 6 per cent. per annum, there is no great fear that when the grazier wishes to retire he need not dispose of his prineipulity for less than he paid for it. The term al corte, which so frequently oceurs in Argentine rural transaetions, is an apt illustration of the abundance of cattle and sheep in that country, and of the consequent rough-and-ready way of dealing with them. Al corte means literally "at the
cat off." It owes its urigin to the eustom of a purchaser being forced to take at random -at so muen per head-whatever cattle, old or young, good or bad, were separated from the herd. Indeed, by the custom of al eorte, the tedions process of counting was not always put in practice. A portion of the herd was separated, and calculated by practised eyes to contain "about" so many animals. On this basis they were paid for at so much per heal, and the purchaser took his chance of the flock containing a few less, just as the seller risked it containing a few more than he had calculated it did. At present a somewhat more systematic plan is adopted on most estancias. The animals are driven into a corral, or rough caclosure, the gate of which is opened just wiae enough to admit of the escape of one animal at a time. They are then counted as they pass out by the interested parties, and the number being filled, the door is closed. Of course animals selected al corte may be good or bad, sound or sickly, and accordingly do not bring over head so much as those selected for the butcher or other purposes.

Life on on estancia is at best but a solitary existence, but to a man who has been cooped up in town all his life, or who is capable of enjoying the perfect freedom, the utter unconventionality, and the health-giving existence of the Pampas, there is an inexpressible charm about it, only equalled, and perhaps surpassed, ly a life on the more beautiful prairies of the north. Mile after mile lie may gallop over rolling plains, through long grass, stumbling in biseacha burrows, or among swampy places where the rain has collected. All around is a horizon. A black cloud in the distance proves, when approached nearer, to be a flock of yultures hovering over a dead or dying ox, or a noisy brood of hawks, kites, and caranchos rise screaming from the weal of carrion at which they are disturbed. Flights of dueks wing their way to the laguna. The biscaehas are asleep in their holes until sundown, the solemn little owls sitting in the doorway, never moving a muscie, save to stare at the horsemen who gailop past, unless, indeed, they run the risk of being trodden on, when they will fly away a few yurds with "soft flapping motion," and then their indignation having subsided, alight again by the side of another burrow, there to sit staring, in their sleepy blind-man fashion, as they lazily mount guard all the livelong day, venturing forth when the sun goes down, and the prairie beasts begin to feed, or grow incautionsly drowsy. A South American horse never jumps; he only gallops unwearily along over grass land, through moute or wood, where it is found, over the muddy bed of pontano, or stream, or by the treaeherous edges of arroyas, lagmas, or banados (swamps), where the tall sedges hide the water, and only a mighty rushing somed tells that the clatter of hoofs have alarmed myriads of wild fowl, ducks of various kinds, teal, and widgeon, mixed with flocks of a speeies of water hen, and rosy elouds of flamingoes. "Storks, mirasols, eranes, some handsome, some foul and meouth, rushed into the air, trailing their hage legs under them for a short ungainly flight, and dropping sleepily into their native mad as soon as we had passed them. We walked the horses for a while, and in the stillness on the soft turf we heard the clear ringing scream of birds, slowly whirling round and round at such a vast height above us, that they were dificult to see. They were great turkey buzzards, unclean carrion lovers, which sometimes alight in such immense numbers that I have mistaken them at a distance for a flock of sheep." The estancia itself is an unimpressive enough looking ated from was not practised so mueh s, just as present a are driven o admit of ut by the e animals bring over has been edom, the : an inexthe more ug plains, ces where ce proves, ing ox, or carrion at biscachas e doorway, ss, indeed, with "soft the side of they lazily 1 , and the orse never ood, where $s$ edges of and only a wild fowl, water hen, e foul and t ungainly them. We the clear ight alove an carrion them at : ghl looking
place. The house is invariably of one storey, with a flat roof approached by steps, often with verandas in front and belind, perhaps a garden, and a little way off a row of still bumbler buildings for the accommodation of the manager and the colpali, or herdsman, while a shed, on the floor of which the peons roll themselves in their ponchos, after gorging themselves with mute' and beef, complete the accommodation for man. The "corrals," or enclosures for sheep and riding-horses, are nut far off, while the bones of defunct oxen and other firutas alel pais litter the ground so plentifully as to suggest that whatever may be lacking on a Pampas estancia, beef and matton are assuredly abundant. The occasional sound of high-pitched-but withat stately-Sparish oaths, the lowing of eattle, or the neighing of horses, are abont the only poumbs that break the calmness of the sultry summer afternoon. Then evening eomes, and the great ball of the sun can be seen sinking bencath the grassy horizon, far off to the west of the limitless plains, with much the same effect as is seen at sea. "The day's work was done," writes Mr. Hinchliff, whose admirable sketehes we have freely drawn upon in this description of an estanciero's life, "the last peon came gallopingr in from a distant station, tossed off his saddle, put his horse into the 'corral,' and prepared to join his comrades in cooking their beef, and chattering over the red glare of a wood fire," wood happening to be common in the locality under description, though argols form the usual fuel. "We could no longer see flights of dueks passing swiftly overhead, and even the seream of the ever-watehful ler-o-tero ceased. The biscachas awoke from their sleep with the very last rays of the sun, and cautionsly peepel from their holes to satisfy themselves that he had really set before they ventured to begin their supper. The stars came out in all their glory, shining through the pure air with a brilliancy which reminded me of many a night among the high Alps, when the stars indeed shone like lamps in heaven. The dogrs at a sheepstation howled for a moment in the distance, and then all was still-buried in that wonderfully impressive silence of solitude, which almost enables the mind to realise to itself the eternal silence of infinite space." At early dawn the oven-birds-sociable feathered beings, who delight to live among the haunts of men-with their rattling note just outsile his window, ronse up the sleener-the Pampero's toilet is soon made-and in a few minutes the air, which has not yet lost the coolness of night, is giving the morning rider that appetite for breakfast, which indeed is rarely wanting in those parts of the world, where late caronsals are rare, and a regular life a necessity to those whe would hope to live long in the land, in either peace or prosperity. The plain is again being gilded by the rising, as last night it was shot with the gold of the setting sun. Preparations are being made for the moruing's work, by a peon driving, in a mad gallop, about a dozen horses back to the corral from the pond where they have been watered, preparatory to being used in the daily operations of the estancia. The Gancho is a moderate liver. He does a hard day's work without uny breakfast, save a series of cigarettes-or a little mali-at short intervals, waiting until he returns for the evening, when he dines staunchly on a few pounds of beef or mutton. Stables or grooms are unknown hereabouts, and aceordingly the man who camot attend to his own horse had better defer a visit to the Pampas until he can. The recalo, or native saddle, is a complicated apparatus-all straps, eoverings, and belts, some for use, others for ornament-and though a great ease to the man who has to do a long day's
riding, is much more wearisome to the horse itself than the European gear of a similar description. It is very cumbrous, weighing from 301b. to 4016 ., but with its various wrappers affords materials for a fair bed to the frugal Gaucho, and moreover gives him, when he has money, an opportunity to ornament it with elaborately stamped leather, and even handsome silver trappings, with spurs, and if he has been very suceessful at the gaming-table even stirrups and bit ornaments of the same metal, plated or solid: even his clothes are seeured with huge buttons of the same metal. The reeado supplies, moreover, in its girth of strong hide, which goes completely round the horse and saddle, a plaee into which to fasten the ring, to which is attached the indispensable lasso, thas throwing the weight and strength of the horse into the scale against the strength of the animal over which he has thrown this familiar implement of the $\mathrm{H}_{4}$ ano-American herdsman. The lasso is made of raw hide, but is rendered as pliable as a rope of silk by constant use and the application of grease. The native whip, or rerenque, is attached to the wrist by a strap passed through a large silver ring, at the end of the beautifully-plaited handle. The frame of the handle is usually of iron, so that the reverque is a formidable weapon either to man or beast. A Gaucho, finding his horse unmanageable, will stand up in his stirrups, and by one tremendous blow between the ears fell the animal to the ground, and then transfer his recado to the next he can find. The maneas, or hobbles, are also useful South American implements for those who have to "stall" their horse under the arch of heaven, and the long-bladed knife worn at the waist is an equally important weapon to the Gaucho, who, to use Mr. Hinchliff's words, uses it "for every conceivable purpose, from cutting a steak to avenging an insult." The same writer so graphically describes another phase of life in the Rio de la Plata region, that I must again borrow from him. It would be unjnst to mangle his deseription by condensation:-"In the country, not very fiur from Bnenos Ayres, houses of small landowners and sheep-farmers are generally to be met with at an interval of two or three miles, and here and there a small shably tenement contains a family of squatters with no ostensible means of supporting themselves, and with a reputation abont as bad as that of the gipsies of Europe. Sometimes, instear of shooting, we would take our horses, and gallop through a round of visits to some of the neighbouring estancias. 'The world was all before us where to chose;' not a fence or barrier all around the plain: a dark spot on the horizom, with one or two ombu trees shading it, would mark the residence of the man to be vinited; and not being bothered ly roads and finger-posts, we had only to ride straight to our distant mark. Vamos! is the word, followed by a touch of the reeenque, which hangs from the wrist, and we are off at a gallop. Take what direetion we may, the terotero are sure to be sereaming in the air, the owls gravely staring from the biscacheros and the earanchos, with their unclean companions picking the bones of the last dead horse. We pull up for a moment to find a good place for crossing the arroyo, and the dueks start from ander the banks so close that we regret having left our guns behiud. A short flounder in the mud, and then we are across the stream, again flying over the plains straight to the omisu tree, rinith legins to look a little less distant, while the dark spot begins to revolve itself in,to a house, and some outlying sheds. We pass the corrals, and the barking of a legion of dogs ammounes our arrival, warning us at the same time to bow to the custom of the country,
similar arious 5 him, r , and at the en his ver, in e into owing animal Isman. nstant wrist handle. veapon in his round, e also ler the weapon urpose, seribe's n him. y, not nerally shably iselves, instead me of fence \% trees thered o8! is we are ing in inelean to find , close I then vihinh it.to a $f$ dogs untry,

and exchange the exciting and exhilarating gallop for a decorous walk to the house. If the putron is at home we are invitel to walk in, and a gossip is at once started about the state of the weather and the sheep. Cigars and matc are provided, if it is in the house of a native; probably a glass of brandy, or cînu, the white rum of South Ameriea, if the host be an Englishman. A visitor is always welcome, and sure to meet with help if he wants any. Away and away agaiin with a fresh sweet breeze and a grilling sun, the most delicious combination of elements that mortal man could desire; away over the springy turf of a country like ten thousand Newmarket heaths put together; away for another ombu, and another dark spot on the horizon. A few leagues' more gallopiug and rejoieing in the exhilarating air, now and again suddenly swerving wavoil a biscachero, and laughing at the discomposure of a placid little owl; starting at last homeward, and ending with a race as fast as the horses could lay legs to the ground, we finish another glorious day of healthy excitement. It seems as if a feev such weeks must add something to a man's natural life." A change is, however, fast coming over the life of the Pampero. A railway to 'Ineuman now stretehes aeross it (p. 233), and the old familiar life is-as we have seen-altering under the influence of that most revolutionary of agents.

## The Gaccio.

This is an individual peeuliarly associated with the River Plate country. In reality he is the peasant-the countryman, as distinguished from the townsman-but the name is usually applied to the native herdsmen, peons, or labourers on the great estancias. Nominally, these men are Spaniards; aetrally in the imajority of cases they have a dash of Indian blood derived from their matermal aneestors. All their work is done on horselack. The lasso and the bolas, or balls at the end of corls, which thrown adroitly soon lassoes the animal pursued (p. 245), are their weapons, flesh their food, and the Pampa their home. Everybody on the Panupas goes about liis business on horseback. The peons gallop down in the morning, lasso an ox, drive it towards the honse, skilfully throw it on its side, and in a trice cut its throat. The cook rides down, euts out what he wants for his master's breakfast, the labourers take what they require, and the puesteros, or shepherds, gallop in from their outlying persts, and return with their day's supply of beef shang on the saddle before them; that is if the estancia is a cattle one. The day's work done, they gorge themselves with meat and matc in any quantity. All other food, unless as mere chance laxuries, they despise. They will eat an armadillo when they ean get him, and a biscacha in the Pampa-for it is not found in Uruguay-though this particular dainty tastes rather too mueh of the hedgehog to be agreeable to all tastes. But beef and mutton are their food, and mats their drink. Desperate charaeters some of these Gauchos are, and any one who has scen the ferocions looking individuals armed with long glittering knives, mounted on horseback, slaughtering eattle at a salutlero, will readily conceive what terrible eavalry they would make under the orders of a Rosas or Urquiza. Indeed, when their passions are ronsed, they never hesitate any more to bathe themselves in human than in bovine blood, though, as a rule, they care nothing for war, and as they have everything to lose by it, and nothing to gain, heartily hate being dragged from their homes, aud
having their horses impressed for no other purpose than to mediate with the sword in a quarrel they know little of, and care nothing abont. It is even reported-though this may be malicious-that courageous as they undoubtedly are, they will, when impressed, take their best horses with them rather than, as might be expeeted, their worst ones, for the simple reason that the swift steed is more convenient for rumning away on. At eattle markings the Gancho is in his glory. 'linere he can display his horsemanship to perfection, just as a Mexican or Southern Californian raquero-who is his northern representative-can. These "rodeos" also give him an opportunity for gambling, for getting too much liquor, and for fighting. When a Gaucho is seen to kiss his knife, and declare something connected with it and another gentleman's internal ceonomy, on the faith of the most pure and immaculate Virgin, then that other gentleman, if he be wise, will take particular good care to put a long distance between him and the proprietor of the adjured blade. Taking them one with another, however, the Ganchos are not a quarrelsome set of men, and a stranger acting with becoming firmness and prudence has little fear as regards either his person or property. Bad characters-native and foreign-there are unguestionably in these camps. Strangers are advised in out-of-the-way parts of the country to beware of the too near approach of every individual who asks for a light for his cigar. It is sometimes best, by way of precaution, to stick your cigar in the muzzle of a pistol, for under pretence of taking it, there are cases known in which the ruffian has stabbed the unoffending stranger. There are even instances on record in which, under excuse of "embracing" a "friend," the treacherous assassin has put a knife through his spine, in expiation of a long-cherished grudge. The ease with which a crimiual can escape in such a boundless country of course favours the commission of all kinds of offences, thongh of late years the admisture of foreigners has done much to civilise and restrain some of the ronghest of the old Gaucho families. Robbery is, nevertheless, not common. It is a proverb in the Argentine Repulbic that nobody plunders except the Government. In !' is normal state, indeed, the Gaucho (p. 217) is rather a good fellow, thongh staid, solemn, and reserved, very undemonstrative, not much inclined to make new acquaintances among the Europeans rearlily, and imbod with an immense deal of the ail. admirari disposition. Nothiug excites his surprise or admiration. The most be will say at news of peace or war will, with a whiff of the cigeretto, be "Quein Sahe?" (Who knows?). If asked to ride twenty leagues, he will simply reply, " Si , Señor," and be off. He is, of course, a perfect horseman, and judges a stranger a good deal as an English groom does, by his eqnestrian skill, and by the horse he bestrides. The times when he gets into tronble are at the pulperias,* or at his holiday in town. He meets strangers at these places, be drinks criun, dances, sings, plays cards, and gets excited by rivalry and other evil passions. A card or a woman may be the subjeet of dispute, but the end of the dispute is the same, namely, the sharp knife which hangs at his back. The Gauchos are great gnitar phayers and improvisatori. These compeitions, also, often give rise to quarrels, the unsaceessful fantor ending the affair by shonting "Caramba!" and challenging his rival t) fight. Foreigners in Argentina are, as a rile, well hohaved, as they are mostly men of substance, and have the responsibilities of property to weight their ragabond

[^84]propensities. But of late years there have also arrived a number of Europeans who do not exactly conform to that standard, and as whole districts are inhabited by hot-blood Irish estancieros, it not unfrequently happens that in the record of deeds of blood other names than those of Juan This or Jose That occur. The camp shops, often kept by foreiguers, are the clubs of the Pampa. Here assemble the different estancieros to buy what they wish, discuss affairs, and too often to play cards, drink, and waste much of the time that might be better employed.* Public rectitude is low, and in some respects private morals are corrupt in the extreme. We have spoken generally of the country, but the manners of different provinces vary considerably, and the character of the people is also different in other parts of the country. The Corrientines-for instance-sneer at the priest-ridden people of the Cordoba, the "city of savants," where the university is situated, while the Santiagueño-or inhabitant of Santiago-del-Estero-has his own opinion about the Mendocinos, San Juaninos, or Entrerianos. As for the polite Portianos-or people of Buenos Ayres-they consider that as the dwellers in the capital they have a prescriptive right to be supercilious to all the rest of the world. But that parochial weakness is not peculiar to the citizens of the Villa of the Good Airs.

## CHAPTER XVI.

## Patigonia: The Falklands: Tielra del Flego.

We have devoted considerable space to the Argertine Repullic; for in these great plains more of our race are seeking homes than in any other foreign country, the United States excepted. In time, many more will follow, and already better times seem in store for those countries so sorely harassed by the foolishness and crimes of those into whose hanc's they fell, after the disruptions of the Spanish Empire of the Indies. The region is, however, so extensive that only the barest outline of it could be given within anything like reasonable space. Even yet, there remain great outlying tracts which we have little more than mentioned. These are the territories of Chaco, Misiones, and Patagonia.

The Gran Chaco $\dagger$ alone has an area of 150,000 square miles, though $i^{\prime} /{ }^{\prime}$ is probably an exaggeration to estimate the population at $50,000-30,000$ woald be nearer the mark. The country is partially wooded, and is reported to be really very fine, and well suited for white settlements. But the Indians, who, except on the frontier, are the chief inhabitants, are not neighbours whom settlers, as a rule, like. Some of the tribes are not without industry. The Matacos, for instance, make the best peons on the frontier estancias of Salta, and in the sugar fields of Jujuy. During the summer the Gran Chaco Indians live on the fruit of the algarrobo (Prosopis), and the "yuchon," and on the fish which they find in the Parana, Paraguay, Pilcomayo, Vermejo, and Salado, and many other streams of smaller size. Agricultural and pastoral pursuits they do not now follow, though, in earlier times, most of the tribes had cattle

[^85]do not d Irish names eigners, at they ne that morals nanners ifferent -ridden bile the e MenBuenos
$t$ to be uliar to
and sheep; but a pestilence carried them off, and they have not sinee male any effort to replace their stock. On the contrary, having accuired a taste for beel and mutton, they now obtain their supplies by robling their richer neighbours. Their life is not, however, a pleasant one. The want of' elothing, bad honses, and precarious lood, wht many of them off. They are grossly superstitions, and live in eontinual drewe of the Gualiche, or evil spinit. 'They barter a few puma, joguar, nutria, and other skius, collect the resin of the "palau-santo," the wild honey from the woods, and the ostrich feathers from the rhea of the plains. But civilisation has as yet seareely reached them, thongh in the time


of the Spaniards some faint attempts were made to inoculate them with the tenets of the Christian religion. A heroic padre or two penetrated the wilderness, but the wars of independence came, and in the clash of civil strife the mimions were forgotten, and the Gran Chaeo Indians left to themselves. Taking advantage of these troublesome times they encroached on the settled country, and took possession of land which they still hold; indeed, at one time, so bold were they that it was dangerous to wander far in the mere outskirts of Santa Fé, "Colonies" are beginning to extend into this territory, and though at present there is little better than a hand-to-hand fight with the Indians, in time the settlers may re-conguer by the plongh much of the territory which was originally won by the sword. The Gran Chaco Indian is not a hopeless savage. The possession of eattle would again make him stationary, and in time the sobering pursuits of agriculture and grazing wonld exert their heneficial effeet in his eharacter. It is said by the official
historians of the Republic that some of the Indians in the Southern Chaco have attempteds even in late times, to rear cattle. But their tribal disputes have impeded even this, while tho thick virgin forests which extend over the territory have prevented their becoming good horsemen like their brethren of the Pampa. In their hiding-places in the woods and swamps - retired spots, which can only be discovered by experienced guides-they lurk sccure against the visitation of the frontier guards, in scarch of the herds which they have snatched in their raids on the settlements, small though these predatory excursions are when compared with those of the Ishmaelites of the Pampas (p. 229). It may be interesting to note that in former days gigantic masses of meteoric iron fell in a remote part of the Chaco, traditionally known as the "Field of Heaven," though, as yet, we know but little about their history.

Misiones is "a small fertile and thinly inhabited country of 10,000 square miles, between the Upper Parana and Upper Uruguay." It is usually included in the Province of Corrientes, and of late years there has been a proposal mooted to break it up into 100,000 farm lots of sixty acres each, to be given free to emigrants, as the soil, elimate, and facilities for getting produce to the markets are considerable, owing to its vicinity to two great rivers. The missions are a part of the old empire of the Jesnits, from which they were driven many ycars before the war of independence. The works which they created were wonderful, but evanescent. Of the 30,000 iulabitants, who in the heyday of the prosperity of the "Company of Jesus" composed the population of the missions, at the end of the eighteenth century-that is, thirty years after their expulsion-hardly 3,000 exist at present, and these have long ago lost their national organisation, and have more or less amalgamated with the neighbouring Correntines. The census, it is true, gave 5,278 as the population. But it must be remembered that 1,178 of these form the population of Tomé, the capital, and of the entire population 1,010 are Brazilians, and 112 Europeans. The country is a charming one, well watered, diversified by hill and dale-wide open plains and stretches-in which the forest is so thick that it must be fired before a clearance can be made. Cotton, tobacco, sugar, rice, maize, mandioca, wheat, potatoes, oranges, cocoa, all grow plentifully under cultivation. Yerba mats grows wild. Near the river Uruguay it forms great forests, and in all one distriet, abont Villa de San Xavier, there is a busy industry going on in the collection of it. The woods produce fine timber, and doubtless in the near future fruit-trees and vineyards will cover the slopes of the hills in this favoured though remote part of the Argentine Repulblic. The great drawback consists in the parrots, which will sometimes eat up a whole plantation in the conrse of a day or two. Carpinchos, wild boars, wood-turkeys, and sometimes a tiger, will afford amusement to the sportsman. But the unpleasantly numerous snakes and crocodiles detract considerably from the pleasures of woodland life; nor do regiments of monkeys add to the placidity of a mission farmer's existence. At one time cement, ironstone, and copper were mined by the Jesuits, but these sources of riches no longer exist, nor are grapes now grown, except to a very limited extent, though in the time of the Jesuits excellent wine and bramdy were among the means by which these shrewd clarenmen managed to make the best of both worlds.

## Patagonia.

Pataguia is claimed by the Argentine Republic, though, in reality, her claim to the whole of the territory has never been conceded by Chili, and indeed by tacit consent the latter power occupies, at least on paper, a part of this hage, wild, lone land of the South. The territory includes all the country south of the Rio Negro, from the Atlantic to the Amdes, down to the Straits of Magellan, an area roughly estimatel to contain 300,000 square miles, or an area very little short of four times the size of Great Britain. The Chilinn portion is that comparatively limited tract on the Atlantic and the Straits of Magellan sonth of Santa Cruz River. The whole region is a wilderness, swept by the howling "pampero" wind, and inhabited by tribes of wandering Indians, to the extent of perhaps 20,000. There is a white settlement at Carmen de Patagones at the mouth of the Rio Negro; at La Piedra, is the site of a Spanish settlement, formed in 1779; and on the River Chubnt, or Chupat, a Welsh colony founded in the year 1805; but with the exception of these comparatively unimportant places, Patagonia is as yet unacquainted with civilisation, and may, probably, for long yet to come, remain in its present condition. The country is, broadly speaking, a table-land more elevated than the lampas, and the vegetation is that of a dry climate, though numerous salt deposits, worked near the Rio Negro, are found in the valleys. The flora is, according to Mr. Darwin, similar to that of Mendoza, and differs from the Pampean vegetation, in the fact that the Pampas are true meadows, in which a few isolated groups of trees are found alongside the rivers, while in Patagoniu is "a mixture of herbaceous plants and bushes, among which one or the other may predominate, or all are equally represented." There is no real turf, though the open places between the tufts are in the winter clothed with the green leaves of the Alfilerillo, a species of Erodiun, which affords excellent pasturage for sheep. This plant sprouts after rainfalls, and generally spreads along with the increase of the flocks which pasture on it. The woody vegetation consists of brushwood so high that a man on horseback will only overtop it, and almost all the bushes are "crooked and thorny, and characterised by a miserable development of the leaves, which are sometimes entirely wanting." The elcui-probably the Orrycladus aphyllus-is covered with a bark containing wax. The Indians burn the branches of this plant by holding them over a receptacle of water, and allowing to fall the resinous-like wax which exudes, drop by drop, into the liquid. This they collect and chew. There are also a great number of tunas, or Cactacece, some of which have thorns two inches long, and as hard as iron. They wound terribly horses not accustomed to these countries. Drs. Heusser and Claraz, to whom we owe these notes, remark that in the low and humid regions, and on the slopes whieh surround these loenlitics, both wheat and rice prosper admirably; but though there are other vegetables, they cannot exist in great quantities, since the wandering Indians subsist almost entirely on animal food, ineloding the horse, whieh exists in considerable numbers. The soil is, however, as a rule, sterile, and the climate severe, and not likely to attract many settlers. At present, they do not number over 4,000 , and of these, at the latest census, the village of Carmen de Patagones, 400 miles south of Bucnos Ayres, contains 2,507 of them. They live by trading ostrici
feathers and skins, guameo, and other skins mud rugs, male of peenliarly manufucturel pelts called "quillangos," and by the cultivation of smull firms, umong the prolucts of which the vine is, probably at no distant period, destined to wht: in some importane.s. The Welsh colony is in a poor wny, and maintains itself in much tho same way ns the limenos Ayres one. The settlement of Santa Cruz consists of only three houses, situated on an island in the river. A considerable quantity of salt might be taken from a deposit on the sonth shoro of the mainland, but at present the place is only a depôt for trading with the Patagronian or Tehuelche Indians (pp. 219, 25:3). During the severe weather large droves of guanacos and ostriches come down to the banks of the river for food and shelter, and are easily celught by the bolas or killed by dogs (p. 9.45). If the hard weather continue, Captain Musters tells us that they will die of starvation, a fact which probably accounts for the numerous bones which Captain Fitzroy found when he endeavoured to aseend the river to its source, in a large lake in the Cordillera. M. Rouquad, a Frenehman, has also a fish-oil factory on the river. There is n want of water throughout a great portion of the comntry. This, combinel with the jeaionsy of the Indians regarding investigations which may lead to settlements, has deprived us of the opportunities of anything but the most vague acquaintance with the riehes or poverty of Patagonia. Diamonds are said to be found in some parts of it, a circumstance which need not be considered ineredible, as a great part of the Patagonian geological formation corresponds with the sterile chapuctus, where the diamond region of Brazil is situated. The valley of the Rio Negro is the forest portion of the country. It is extremely fertile, and here grapes, conifers, and apple-trees are foumd in such abundance that the wild Indian, deseending into this pleasant dale from the winly uplands, where the ehilly breezes blow from all directions, considers that he bas entered an earthly Paradise. But taking latagonia as a whole, the seasons, except in the warm valleys, may be deseribed as "fg long wiuter and a severe spring."; We may condude these notes on the outlying dependencies of the Argentine Republic hy some remarks on the climate generally of the country, more especially of the part which we bave just lelt. It is maturally very diverse in this respect, owing to the great extent of latitude over which it extends. Sunthern Patagonia is not so iuhospitable as Labrador, though both countries are about the same distance from the Egnator; but it is colder than districts of Europe the same distance from the North, as it is from the South Pole. These faets may be explained by the circumstanee that the cold waters of the Antartic Ocean flow north through the Atlantie, throwing the warmer tropical stream down on the shores of Brazil and Patagonia. "Argentine Patagonia," writes Mr. Parish, "might not inaptly be termed the Swelen, and Chilian Patagonia the Norway of the Southern Hemisphere. In the north of Patagonia, and the southern part of the Province of Buenos Ayres, the climate, as regards temperature, resembles that of England; and northwards of this is the hmadest part of the Republic, which contains the eity of Mendoza in the far west (p1. 220, 221, 225), and Buenos Ayres in the cast, and enjoys one of the finest elimates in the world, rivalling that of Southern France and Northern Italy. North of this, the summer heat becomes too oppressive, and in the extreme north the elimate is thoroughly tropieal. In some parts of the north-west, the altitude of the country gives

[^86]cetureel which Welsh Ayres island sonth gonian as and ly the is that which large on the nbined ments, 3 with f it, a gonian region untry. ndance where radise. bed as tlying of the liverse uthern same from stance g the onia," in the a part lat of is the enjoys Italy. limate gives (1876);


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## IMAGE EVALUATION TEST TARGET (MT-3)





Photographic Sciences
it a cooler climate than that of the Chaco in the same latitude. Along the Argentine slopes of the Andes, and the adjacent conntry, the climate is remarkable for its dryness, beeause the prevailing westerly winds lose the moisture which they bring from the Pacific before crossing the mountains. This peeuliarity is most marked in the southern part of the continent, where Chilian Patagonia is deluged with almost ineessant rain, while Argentine Patagonia is dry and arid. In the east, as at Buenos Ayres, there is more rain, which, with southerly and oceasional north-casterly winds, forms the most disagreeable and unhealthy weather experienced in that part of the country. The climate of Cordoha, and also that of some of the more westerly districts, is found very suitable for consumptive patients."

## The Falxland Islands.

In our journey southward we have arrived at the Straits of Magellan (p. 256), and that region which borders the stormy Cape Horn. Before passing to the pleasant lands of the Pacific we must again voyage a little east. Two hundred and fifty miles from the coast of Patagonia we come to a scattered group of islets, bleak, bare, and uninviting, over which again we sce the British flag waving. These are the Falkland Islands, an English Crown colony, but a colony which the Argentine Republic never conceals its opinion that on all principles of justice and international fair-play we have no right to. Discovered by Davis in 1592, they were successively held by the French and Spaniards. After the declaration of Independenee, the Buenos Ayreans established a colony, but the settlement was burnt as late as 1831, and in 1833 the British Government seized the islands for the purpose of establishing there a refuge for distressed whalers or other vessels which might have got damaged in doubling Cape Horn. The Argentines elaim that they were in full possession of these Malvina Islands-as they call them-when, on the 3rd January, 1833, H.M.S. Clio hoisted the English flag on Port Ruiz, or Soledad, and displaced the lawful owners. It is true that England claimed the dominion over these isles after the fall of tho Spaniards, though at the same time the Argentines contest that they, as the rightful heirs of Spain, have the best right to them, and that when they took possession of them England raised no objections. The United States also recognised the Argentine claim; only "'perfidious Albion' took possession of Argentine property, well knowing that the young Republie was engaged in civil war, and was not in a condition to repel force by foree," but only by a very wordy protest, often repeated, but as frequently disregarded. It might, of course, be adied as a corollary to all this, that a nation so often engaged in "civil war" has thereby demonstrated that it has more territory than it can govern, or that if the Argentines, as the fierce rodomontade of the official document has it, would have "repelled force by force," they have not up to date attempted it. However, there is no use denying the fact that we Britons hold this sea-laved bit of old Patagonia by a tenure perhaps not more sound than some of our title-deeds to other parts of the world. The Argentines have doubtless the best of the argument, but we have the islands, and are not likely to be argued out of them. The "Autocrat of the Breakfast Table" convinced the " young man of the name of John" that though, aceording to his own showing, there were three Johns in one person, that
it was an illogical epplication of the argument to eat the three peaches on the plate. But as the fruit was eaten before the fallacy was demonstrated, the practieal •result was nil. And so is it with the Falklands-Q. E. D. There are two prineipal islauds-the east and west ones-and about one hundred smaller ones,* comprising in all an area of about 6,500 square miles, enjoying a moist though very healthy climate. The islands are usually flattish, bare, treeless, in many places rather swampy, and, when they have not been long grazed on, covered with the tall tufty grass known as the tussac (Dactylis caspitosa), and abounding in excellent harbours, while the shores swarm with fish, and at certain scasons penguins and seals are killed in considerable numbers for the sake of their oil. There are few high points, except Mount Adam, 2,315 feet, Jason Steeple, and Mount Viale, named after an Italian of Buenos Ayres, who, in 1871, lost his own life in trying to save that of others. In the vicinity of the little capitalcalled Stanley-there is some cultivation, but the islands are essentially pastoral, sleep, and not cattle, being the stock chiefly in favour, though the wool, owing to the elimate, has a tendency to grow coarse. The Falkland Island Company are the chicf landowners and stock-raisers. Their sheep number between 80,000 and 100,000 , while their droves of horses and tame and wild eattle, herded by Argentine Gauchos, number from 19,000 to 30,000 , according to different estimates. The supplying of ships with fresh provisions forms the chicf occupation of the inhabitants, though necessarily wool and hides are largely exported.

The latest statistics (1875) which we have from the colony gave the population at 1,057 -720 males and 337 females-which is an advance over the number of inhabitants in 1871 of 201. In 1876 the number of inhabitants had risen to 1,153 , which seems chiefly due to natural increase. The revenue was, in 1875, $£ 10,803$, and the expenditure $£ 10,557$. In the island there were 2,150 horses, 24,750 tame cattle-little more than half what the returns for 1871 give- 185,400 sheep, more than double that of 1871 , and twenty goants, about one-fiftieth of the number four years previously. Nothing, except butehers' meat, is cheap, and wages are moderate. Shepherds, for instance, get from $£ 50$ to $£ 84$ per annum, Gauchos the same, while labourer's wages are $£ 4$ to $£ 5$ per month without food. Tradesmen are paid much more highly, and domestie servants get wages varying from $£ 20$ to $£ 72$ per annum. Either houses in the Falklands musi be very dirty, or eharwomen scarce, for their pay is put down in the efficial rolumns at (is. per day. The entire prosperity of the Falklands depends on the use of the vast tracts of pasturage, which are admirably suited for sheep, the winter being much milder than in Englaud, and the summer much cooler. The "squatters" do not own their "runs." As in Australia, they lease them from the Government, the average rent being something like $\mathfrak{f 6}$ for a seetion of 6,000 acres, these rents yielding, in $1875, £ 1,600 \mathrm{Ss}$. 7d., though even yet the eolony is not self-supporting, the revenue being annually supplemented ly a Parliamentary grant. At one time the sealing trade was of much importance to the islands, but that has now almost entirely collapsed. The repairing of vessels, disalled by the storms of Cape Horn, has also of late years not been very profitable to the islanders. The new order of things have preventel old and unseaworthy vessels from attempting the passage round

[^88]the Cape, while the fear of desertion by the scamen have also materially deterred skippers from "putting in" to the islands. The wheat trade of San Franciseo is now, to a considerable extent, carried on by the Pacific Railroad, and this nltered state of matters, of course, very sensibly lessens the number of ships coming round "the Horn," and naturally injures the Falklands. I huve spoken of the climate. Governor D'Arey considers that though there is more raintall in the Falklands tham in London, yet that "soaking wet days" in the lalklands are rarities. The winds are, for the most part, westerly, a Falkiand saying being that the wind does not blow from the east twenty days in the whole year. The climate is said to have undergone a favourable change of late years.


VIEW IN TIE NTHAIT OF M.ViNIIIAN.
So severe were the winters about twenty years ago, that on one oceasion, which the Governor describes, the herds of cattle in Lafonia Peninsula fled northward before a southerly gale, accompanied with a snow-storm of such severity, that on being checked in their stampede by the peat wall covered with gorse, built across the isthmus, they wildly leaped over a high eliff, and were dashed to pieces. Of late years the winters have, on the contrary, been so mild, that, although horses and cattle are never stabled, it is rare to hear of an animal dying of cold or hunger. The winds that blow over the Falklands, owing to their distance from any land, are all laden with iodine and saline particles, and are very purc. Hence the climate is peculiarly favourable to the recovery of those suffering from chest diseases.

Beyond those which we have here mentioned, the islands have few or no resources. Peat is practically inexhaustible, but the bright hopes which were beginning to be entertained regarding the discovery of coal on the islands have been set at rest by the
resources. $g$ to be it by the

very painful diseovery that the supposed seam was only slaale. The iuhahitants of the Falklands are a particularly law-abiding class, a single policeman, until recently, representing his side of the majesty of the law in the islands. 'Ihere are now, in addition, a few "embodied pensioners" on the islands, though their services are scarcely necessary during peace, while they would be of little avail in time of war. The Falklands have very little attraction about them. Port Stanley, the capital, with its white cottages"grey stone houses seattered along the side of a bare, low, bleak hill"-is not considered by strangers an aftrective place. One voyager declares that, with the exception of Tristan

d'Acunha, he cannot recolleet a "more dismal, miserable" village, and one more devoid of all interest than Stanley. From the landing-place " $a$ street, so called, leads to the top, of the hill, and branehing away is Ross Road, which runs along for some two miles, facing the harbour, and in front of all, the houses. At its western extremity is Government House, a plain stone building within a fence. At the other extreme is the cemetery. This appears to be the only level walk in the colony. The hills are but rarely available for a walk, consisting for the most part of little else than roek and boggy ground."* Port Louis, the capital of the colony when the French held the islands, consists at present of only one house, ereeted as a barrack some years ago, but as Stanley since 1812 has been the plaee of Government, Port Louis has been deserted. The country is bare of trees, and all attempts to introduce them have hitherto been attended with failure. Even shrubs are
"Spry: "The Cruise of H.M.S. Challenger" (1878), p. 301.
scaree, the only ono which merits the name being Verouica dechssata, confined to the west island.

The flora and the fauna are also to a great extent that of the neighbouring Patagonian coast. It is, however, curious that though trees are wanting in this inhospitable spot, several species of plants oceur which in the Strait of Magellan country are strictly confined to the woods, and are not met with in the open plaius of Patagonia. This may be due to the greater rainfall in these regions, which is much greater than in eastern Patagonia. The country is in places covered with the diddledee berry, identical with our crowberry, the balsam-bog (Bulux glebaria), the Falkland Island tea-plant (Myrtus "numianluria), and the "almond tlower" (Callirene utargiuata). The balsam-bog appears in the form of huge, perfeetly hemispherical hillocks, of a pale and dirty yellow-green colour, aud uniform surface, so hard that one may break the kuuckles on them. "lf the day be warm"-we are quoting Hooker's Flora Aularcticu-"a faint aromatic smell is perceived in their neighbourhood, and drops or tears of a viscid white gum flow from various parts of these vegetable hillocks. They stand apart from one another, varying from two to four feet in height, and though often hemispherical, are at times much broader than high, and even eight to ten feet long. The very old ones begin to decay near the ground, when a crumbling away commences all round, and having but a uarrow attachment, they resemble inmense balls or spheres laid upon the earth. Upon close examination each mass is found to be herbaceous throughout, the outer coat, formed of innumerable little shoots, rising to the same height, covered with imbricating leaves, and so densely packed that it is even difficult to cut out a portion with a knife, while the surface is of such uniformity that lichens sometimes spread over it, and other plants vegetate on its surface, in the occasional holes or decayed places. If at a very early period a young plant of the Bolute be removed and examined, the origin of these great holes can be traced, for each of them, of whatever size, is the product of a single seed, and the result of many, perhaps hundreds, of years' growth. In a young state, the plant consists of a very long, slender, perpendicular root, like a whip lash, that penetrates the soil. At its summit are borne two or three small branching stems, each closely covered for its whole length with shooting leaves. As the individual increases in size, the branehes divide more and more, radiating regularly from the resting centre, instead of prolonging rapidly; these send out lateral shoots from their apices, and in such numbers that the mass is rendered very dense, and ly the time the plant has gained the diameter of a foot it is quite smooth and convex to the surface. The solitary root has evidently become insufficient for the wants of the mass of individuals, which are nourished by fibrous radieles, proceeding from below the leaves, and deriving nutriment from the quantity of vegetable matter which the decayed foliage of the lower parts of the stem and older branches afford." The myrtle gets its name of Falkland Island ten from its leaves having been sometimes used by the sealers who visit the island as a substitute for the Chinese herb. The almond flower belongs to the order of lilies, and is so-called from its delightfully fragrant odour. In the islands it clusters in rocks, but in the Strait of Magellan it principally occurs half buried in moss at the bases of the trees. Another plant, which the voyager to the South usually sees for the first time at the Falklands, is the gigantic Lessonia, a seaweed, with a "stem" as thick as the
human thigh, and five to ten feet long, with "leaves" from one to three feet in lengtl. Those not aequainted with its nature have taken it for drift-wood, and the botanist of the Antarctic Expedition, under Sir James Ross, relates that on one occasion nothing could prevent the eaptain of a brig from employing his boat and boat's crew, during two litterly cold days, in eolleeting this incombustible weed for fuel. The only other "natural curiosity" of the Falklands which we ean find space to notice consists of the "streams of stones." 'íhese are composed of immenso aceumulations of great angular pieces of quartz spread out in belts, sometimes as much as a mile broad, and two or three miles long, in the valleys, extending in some instances to the top of the grey quartz hills, from which they appear to be derived. They really look as if spread out by some great river, though a glance shows that water has hal nothing to do with their present arrangement ordeposition.* Muny have been the theories voluntecred in explanation of these "streams." Mr. Darwin apparently looked upon them as the results of some great convulsion, and more recently Sir Wyville 'Thomson has ventured on another explanation, without, however, in any marked degree clearing away our difficulties. South Georgia-a barren group of islands lying still further to the south-is iuchuded in the colony. At one time, during the palmy days of the seal fishery, they were frequented during the summer months, hat since the deeay of that braneh of trade they are rarely visited.

The revenue of the Falkland Islands for $18 \pi 7, \dagger$ exclusive of the Parliamentary grant, was $£ 3,280$, being a slight increase over that of the preeeding year, while the total expenditure required to earry on the service of the colony for the year amounted to $£ 6,260$, a considerable diminution under the sum neeessitated in 1876 . The expenses of the eolony have thus greatly decr ased sinee 1576 (p. 255). The value of the imports in 1877 was $£ 33,283$, and the exports-wool, tallow, penguin oil, seal-skins, \&e.-about £j9,578. Regarding politics, I am enabled to learn little about from the official reports befure me, except that Falkland legislation must be very quieseent, sinee, in 1877, no loeal ordinanees were passed. The great sheep dip and scals eontroversy appears, however, to have agitated the islanders not a little, and His lixeelleney, with that sound practical wisilom whiel charaeterises him, devotes several pages of his oflicial report to recipes for preparing "lime and sulphur sheep dip," and to the desirability of introducing a "seal) ordinance," and a seab inspector to see the ordinance carried out. It is complained that the farms are under-manned in proportion to their great extent. There is hardly any tillage on these sheep and eattle "runs," and it is only of late years that kitchen gardens have been introdueed into "the eamp." Milk and butter are scarce. Most of the latter is inported from Eagland, and considerably more preserved milk than fresh is used, notwithstanding the number of cattle on the islands. These and other eauses have conduced to the stagnant condition of the colony. Cattle and sheep breeding, killing, clipping, or builing down, seem the occupations of the greater number of pecple. The following extract from a letter written by the manager of the Falkland Islands Company deseribes

[^89]the method formerly adopted by the cattle herds in slaughtering eattle:-"Cattle killing by the Company's Gauchos is carried on princips.lly in the summer months, when the Gauchos, six or more in number, go into Lafonia with tents, and move round the coast from district to distriet, salting the hides on the adjacent beaches, whence they are removel by schooners. The system of killing is as follows:-'The Gauchos leave the tents on horseback in the early morning, and keep together until they sigit a herd of cattle; then getting as near as they can without being observed, they dash into them, eaeh man selecting his animal, which he lassoes, one end of the lasso being made fast to the ciurchu, or girth of the saddle, the other in a nouse round the neck of the animal. As som as the Gaucho manages to throw his ndversary by entangling his legs in the lasso, he jumps off his horse, which keeps all the time a tight strain on the lasso, and, approaching from behind, euts a sinew or teudon behind the fore-quarter, which at onee makes the amimal helpless. The Gaucho then mounts and goes after another, with which he deals in the same manner, and so on until the eattle are out of reach of the others on the beach. As a rule animals cut down in the morning are killed and skimed in the afternoon; but there is no doubt that in former years, whon eattle were more plentiful, Gauchos would cut down for a whole day, and skin the next." This cruel practice has, owing to the representations of Govermor Callaghan, been discontinued, and the cattle are now killed immediately after being "cut down."

The total number of sehool-children enrolled in 1877 was 139, with an average attendance of 77. School attendance is irregular, and the standard of education low, owing, to some extent, to the fact that after the age of ten or twelve, children assist in various rural occupations, more especially during peat-cutting time, when labour is even seareer than usual, and young lads can obtain good wages. Those boys who do not become labourers usually find employment in "the camp," which seems to have much fascination for the youth of the colony. With the exception of a few carpenters and masons, most of the colonial artizans come out from England.*

## The Strat of Magrlaan.

Fernando de Mugellan-or Magalhaens, as his name ought properly to be writtenwas a seaman of Oporto, who served the king with much distinction in the East Indies. But in 1517, thinking his reward not equal to his merits, he transferred his allegianee to Charles V. of Spain. A caballero, who had won his spurs under Alluquerque, and was a friend of the renowned Ruy Falero, geographer and astronomer, was a welcome aecession to the servants of His Catholic Majesty. Accordingly, on the 20th of September, 1510, we find Magellan sailing from San Lucar, with five sinips and 236 men , on an attempt to reach the Moluceas by the west. What befel him on this memorable voyage-the first ever made around the world-or how he was slain in a petty squabble in the Philippines, it is not cur purpose to deseribe. It is sufficient for us to know that he sailed from the South Atlantic, and diseovered the South Pacific, and that he passed to the latter

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A FOREST VIEW ON THE BANKS OF THE RIVER SEDGER, BRUNSWICK PENINSLLA.
sea through the Strait which has ever since borne his name. The Strait of Magellan has for long been the chief course between the two seas, though, owing to the bad charts, uncertain weather, and the treacherous character of the natives, many captains have preferred to risk the storms of Capo Horn rather than take the shorter passago further north. It separates the South Americun mainland from the broken group of the islands which end the continent under the name of Tierra del Fuego. In length it is 300 miles, in breadth it varies in different parts from five to thirty miles, and the shores are diversified in aspeet, but in general rather pleasant, and far rieher in vegetation than might be presaged from the low southern latitude in which it lies (p. 2j6). On one side is Patagonia, woodel in most places down to the very shore, on the other Tierrn del Fuego, iom anong the valleys of which glaciers creep down to the sea, but, owing to the abundant moisture which falls, the otherwise bleak-looking islands are in sheltered places covered with forests of considerable luxurianec, though at but a small height absve the sea a flora corresponding in character with that of the Aretic regions is found. The seenery is wild. A voyager describes the country in the vieinity of Port Gallant, in the Brunswiek Peninsula, as " $a$ country of, first, a series of densely-wooded, nearly perpendicular slopes; next, an almost infinite succession of grey precipices of grass and granite, with a multitude of foaming caseades pouring down their fissures; then vast tracks of spotless snow, and finally black jagged peaks half concealed by the clouds" (pp. 261, 264). These Antarctic forests probably terminate a little north of $34^{\circ} \mathrm{S}$. latitude, which is also their limit on the western slope of the Andes, where, as in Valdivia, Chili owes mueh of her wealth to her wooded provinces near the Cordillera. That portion of the continent which extends from the Chonos Archipelngo on the west coast southward is a most inhospitable part of the world. Wild tempests and almost incessant rain render cultivation difficult, and settlement all but impossible. Real forest is only found in this part in the deep valleys proteeted from the tempest, that elsewhere prevent the growth of trees. On the higher grounds, exposed to the fury of the frequent storms, only a few weeds and bushes maintain an unecrtain foothold. The trees here, and on the shores of the Strait of Magellan, are two species of beeches, and the famous Winter's bark. The thick underwood consists of two species of barberry (Berberis ilicifolia and B. dulcis), and other Antaretic speeies, which we shall presently note.

Dr. Robert Cunningham,* to whom we are indebted for the best and only detailed account of the natural history of these regions, deseribes the country in the imnediate neighbourhood of Sandy Point as covered with a forest in many respects similar to our own familiar English woods, exeept that there is a greater preponderance of prostrate trunks and ereet whitened skeletons. The prevailing tree is the Antarctic beech (Fagns antarctica), but an evergreen species of the same genus (the Fugus betuloides) occurs more plentifully west in the Strait. The Winter's bark is also present. The first-mentioned tree is $n$ very beautiful one, frequently attaining great dimensions both as regards height and girth, though the nuts are not over a sixth the size of those of the species with which we are familar in England. Often in the western part of the Strait, where the evergreen beech is the prevailing tree at the sea level, and for a considerable distance up the mountain sides, a well-marked zone of the tree just noticed (the deciduous species)

[^91]is to be seen above the evergreen woods, at $a$ height of 1,500 to 2,000 fret. On the summits of the mountains small stunted bushes are frequently to be met with. The overgreen beeelh, looked upon by the earlier voyugers as a myrtle, is on the whole the tree most frequently seen from the westward of Port Fimmine, throughout the Strmit and along the west const of Patagonia as far us the Chonos Arehipelago, where the vegetation is rather more diversified. It does not equal the Antaretic beech in size, being rather over fifteen or twenty feet in height. The third tree, or Winter's bark (Drimys IInteri), is a species of the family of Magnolius. It is a noble tren, wxtending throughout the wooded country of the Strait and Western Patugmia, nud is even foum in a slightly chunged form in the woods of Chili. This tree was known to the early royngers, who employed its smouth grey bark as a condiment and anti-scormatic ther their scurvy-riddled erews. It lerives its name from Captain Winter, who was one of the compmions of Sir Francis Drake in his voyage round the world in 1577-s0. The bark, which in uppearance is not unlike that of Canellu, is still oceasionally used as a stimulant nromatic tonic. The Veronica lechssalu ( $\mathbf{p}$. $2 \mathbf{2} 5$ ), often twelve feet in height, and the F'uchsia Magellanica, which generally oecurs in thickets, and affords a convenient shelter to the luegian huts, and food to the humming-birds, are among the other notable plants of the Strait of Magellan and neighbouring country. In these woods, woodpeekers, parroquets, hawks, and other birds are found, though insect life is, as a rule, not plentiful in the immeliute vicinity of the Strait. Buttercups, and a large-flowered white anemone, are common, and on the branches of the beech-trees s.re often found round nest-like masses, about the size of a human head, which prove to be curious leafless parasitic plants allied to the mistletoc. The name of these is the Myzolendron punctululum, a plant confined to the forests of South Ameriea, from Cupe Horn to Valdivia. Another parasite is Cyllaria Durwiuii, a fungus which forms part of the food of the Fuegian Indians, but it has little to recommend it, being very tasteless and tough. Orehids grow under the trees, and a species of Carilamiue, or hadies' smock, is common. The open flat country is dotted with shrubs and Chilubuthrium, and is frequented by the Bundurria, the Spanish name for a large species of ibis,* which has given its name to these plains. At Christmas, swallows sweep rapidly over them, and small Hoeks of birds watch the traveller warily, and immediately on being alarmed fly to snech a height that they are out of shot. Snipes, steamer ducks (the most remarkable bird of the Strait), and a host of other water-fowl make these regions lively with their elamour. $\dagger$

Some parts of the Strait are bordered by towering eliffs, which rise majestically out of the fog which so often envelopes this region. Queen Adelaide Land-a large island-is, for example, composed of grey rugged mountains, capped with snow, and supporting large glaciers, while the shores in more sheltered places are covercd with woods so thick that it is difficult to penetrate their tangled thickets. There is now only one small settlement in the Strait. At Port Famine, in the Brunswick Peninsula (p. 257), east of Cape Froward, the most soutiern part of the continent, a penal settlement was, in 1845, established by the Chilian Government, but nearly three hundred years before the Spaniards attempted to establish forts in this vieinity, so as to prevent the English from passing through

[^92]from sea to sea. The colonists were left to their fate, and when visited six years after-wards-in 1587-by Cavendish, it was found that only twenty-four out of the original four hundred had escaped starvation. Hence the name of the spot. The convict settlement does not seem to have proved much more successful, for after being often reduced to great straits by failure of supplies, the convicts rose, killed all the officials, and though for a time they managed to escape, they were afterwards captured and punished. Port Famine seems, indeed, a spot accursed of fate, for here in the first quarter of this century one of the best surveyors of the Strait put an end to his life, his mind having given way, it is believed, under the strain of anxiety and hardship incident to his labours. At Punta Arenas (Sandy Point), on the shores also of the Brunswick Peninsula, the convict settlement which used to be at Port Famine was removed after the outbreak of the "deportees." There are-or were-in addition to the officials and soldiers, about one hundrea prisoners. The buildings are so grouped as to form lines of straggling streets,

entrance to fortebcle bay, bucnswick peninstla.
running nearly parallel to the beach. There are, in the vicinity, a considerable tract of open country, abundant forests, and a coal seam, situated about six miles inland, though connected with the settlement by means of a line of railway. Gold is also found in the bed of the Rio de Oro, though the results of washing have hitherto not been great. Settlers came here in some numbers a few years ago. There is still a colony of Chilians and Swiss at "Agua Fresea," south of Sandy Point, besides others on the Rio de Chivos. The climate is in summer very pleasant, resembling the best antumn weather in the north of England, but with the exception of rye, oats, and the bardier varieties of barley, cereals do not ripen, though potatoes, peas, calbages, and lettuce generally come to maturity. As the Pacific Steam Navigation Company's vessels now pass through the Strait on their way to Valparaiso, the settlement ought to prosper, though in 1877 it was visited by such a calamity as that which befel Port Famine. On the llth of November the garrison, taking advantage of some laxity in discipline, mutinied, set free the convicts, and under circumstances of abominable atrocity murdered nearly all the settlers, and officials, and fled northward through the plains of Patagonia. They quarrelled, however, among themselves, and were speedily captured.
ears afterce original 2e convict ing often ficials, and hed. Port is century ing given pours. At he convict ak of the about one g streets,
e tract of d, though lso found herto not e is still des others the best oats, and ages, and 's vessels o prosper, Famine. discipline, atrocity plains of captured.


VIEW OF THE PEAKS IN THE VICINITY OF ADMIRALTY STHAIT, TIERRA DEL FCEOO.
It has since been mooted by the Chilian Government to entirely remodel the place, eliminating from it the convict element, and converting it into an agricultural, trading, and mining settlement.

## Tielra del Fuego.

This, the southernmost part of America, is in reality only a broken group of islands. The largest of these is King Charles's South Land, 500 miles long by 300 broad. There 114
are, in addition, Hoste, Desolation, Clarence, and Navarin, of considerable size, and a great many all mueh smaller. Cape Horn is the sonthern promontory of a small isle of the same name. Towards the Paeifie side the islands are, for the most part, rlevated, rugged, and broken, but those facing the Atlantic are, as a rule, lower, and wooded, but the general aspect of the country is wild, desolate, and nuinviting in the extreme. A low undergrowth covers the space between the trees, and everywhre fallen timber-damp, decaying, and dismal-renders travel over the country next to impossible. Yet certain localities are, as we have already indicated, exceptions to this rule. One of these is Picton Island, which resembles the south-west coast of England: the south part of it is moor and down, the north is covered with thick woods. Lakes abound, and millions of familiar-looking water-fowl, with their unceusing din, for a time make us forget that this pleasant region is so far in the outer worll. Though voleanie products are commonly found, and many of the mountains are extinct voleanoes, yet there is no appearance of any of them having been active since man became acquainted with this region. The name Tierra del Fuego-"Land of Fire"-which the early explorers applisd to it, was owing to their having seen a peculiar light over the land. This is still sometimes noticed, though the cause has not been oxplained. The highest mountainsSarmiento and Darwin-are from 0,000 to 9,000 feet in height, and it is almost needless to say are perpetually capped with snow (p. 265). The inhabitants we have already described,* and need only touch upon in this place. They number about 2,000 , sentereel in little tribes over the coast of a territory containing something like 26,000 square miles. They are a stout race of Indians, mostly in the lowest state of degradation, and physieally short, ugly, and beardless, with long black hair. They are, however, said to be robust, and without any peeuliar diseases, thongh continually living from hand to mouth, exposed to the vieissitudes of one of the worst climates in the world, with seareely more clothing than a bit of skin, which is shifted in aecordance with the direction from which the wind may be blowing. They live on shell-fish, fish, a fungus found in the woods (p. 263), and-briefly-on anything they can get. Of late they have contracted a taste for smoking, and pester the crews of passing ships for the "tabäà" they value so highly. When driven to extremities they kill their dogs, the only domestic mimals they have, and it is said will even resort, when hard pressed, to their old women as an artiele of dict. Sever.l attempts have been made to convert them to Christianity, but hitherto without mueh suceess. In 1850, arrived Captain Allen Gardiner's party, but from the day of their landing they met with nothing but opposition and disaster, and in 1551, owing to supplies not reaching them from home, the whole party died of starvation. In 1851 , another effort was made to found a mission party, but after many vain endeavours to gain a footing the attempt was abandoned. Still later (in 1855), the South American Missionary Society essayed the conversion of the Fuegians. Instead of trying at once to form a settlement in Tierra del Fuego, they selected Keppel Island, one of the Falklands, as a basis from which they might leaven the stvagery of the mainland. Here they convey such of the Patagonians and Fuegians as are perfectly willing to come, instruct them in the rudiments of the Christian religion and civilisation, meanwhile engaging them in farm labour,

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and taking them baek to their own country when they desire to return. Some of them will stay a few months, others two, three, and even six years. When they return they have a grood ontfit given them, and if they are thought likely to take eare of them, goats and cows are added. The consequence is that the work on Keppel Island has led to a promising centre of eivilisation in Tierra del Fuego itself. There is also a missionary station at Ooshooia (p. 268), on the mainland, which appears to be prospering in a wholesomely quiet way. It was established in 1860, by the Rev. Mr. Stirling, now Bishop of the Falklands, who took up his residence there in a hut, and was for a considerable time left to face the dangers of his position alone. The natives are now learning the blessings of eivilisation, and their kindness to the shipwrecked crew of the San Ruffice in 1877 is in marked contrast to their former barbarities to those who fell into their hands. The following instances of this are given on the authority of Admiral Sullivan. The boats of the Beagle, when on the surveying expedition of the late Admiral Fitzroy, savel the erew of a shipwrecked vessel some distance to the west of the Beagle Channe'. So great was their dread of the natives that the seamen had stockaded themselves, and prepared powder, in order that, in the last extremity, they might blow themselves up rather than sulmit to the cruel mercies of their brutal enemies. In 1553, a California-bound ressel was stranded. The Fuegians came down in largs numbers, and plundered the ship, and set fire to the cargo. The erew fought for their lives and their vessel, and succeeded in bringing her to the Falklands. There are other and more reeent eases, though now that the traffic is ehiefly through the Strait of Magellan, these disasters will, independently of the fact of the lessened barbarism of the Fuegians, be rarer and rarer. It is proposed to establish a second missionary station, so that in time there is hope of the Fuegians, who are still, notwithstanding the efforts deseribed, for the most part in a state of the rudest savagery, being induced to imitate the better ways of life of that God-like man, whose likeness they so distantly bear.*

Yet Señor Moreno, a later explorer of these regions, is not inelined to take a pessimist view of the future of northern "Fireland," at least. The western part, both of Patagonia and Tierra del Fuego, is boisterous and rainy almost all the year round, and glaciers extend to the sea. But on the east side those sudden atmospherie changes, which cause so many shipwrecks, are unknown. "I can assert," writes this traveller, "from my own observations, and what I have learned, that the climate from River Santa Cruz to Cape Horn may fairly be compared to that of Great Britain from the English Channel to the ncrth of Scotland. On the ligh lands it is dry, with night dews, but little rain. In winter snow falls, but in spring, summer, and autumn, the climate is delightful, with some few days of intense heat. In the Strait it rains oftener-about a third of the rainfall in Buenos Ayres-but the snow keeps th: soil moist. The winds are very variable, those from the poles prevailing. January, February, and March are dry: snow legins to fall in the month of April. In winter the mean temperature at Sal ; Point is $3^{\circ}$ centigrade about zero; in September and Oetober, storms; and November and December, dry. All this makes the country healthy, and epidemies

[^94]unknown. The vegetable productions are numerous. Potatoes yield thirty to fifty for one, and flourish splendidly at Santa Cruz. Wheat can be grown there and at Rio Chaco, but not at Sandy Point: but oats, barley, and above all vegetables, grow to a prodigious size at the latter place. Tierra del Fuego, at Isla Grande [King Charles' South Land], has a climate like the Falklands, where sheep flourish so well. Southwards at the English settlement of Oosnooia, twenty leagues north of Cape Horn, cattle thrive, and most vegetables also. The aborigines live almost naked, and humming-birds and parrots are seen, so the climate cannot be very inclement." This may be somewhat too bright a picture, but there ean be no doubt that in the Strait of Magellan, at least, settlements might prosper, and are likely in future to do so if the coal mines turn out prosperously. In 1875 the Chilian settlers there saved 146 persons from drowning, and more could have been rescued were there lifeboats and proper appliances at hand.

At one time the sealing trade used to attract a good number of adventurers to the vicinity of Cape Horn, and the Antarctic island lying still further south. Sea-lions (Otaria jubata) may yet be seen in arandance in and about the Strait. The fur-seal (Arctocephalus Fulklandicus, p. 269) is also occasionally sighted. The scalers on these Antarctie islands are for the most part from the United States. They are landed by their vessels, and then separate in little detaehments, each detachment having a well-defincd beat. They live in filthy huts sunk in the ground for warnith and protection from the gales, which often blow with great violence. After a time the sehooner returns for them and their capture. Meantime, the men lead a lonely life, living on penguins, young albatross, and sea-birds' eggs. Their cains are not high. They usually sign an agreement for three years, at the expiration of which period, if they have had a lueky season, they are possessors of $£ 50$ or $£ 60$ to return home with, and perhaps to be squandered in a aouple of months.* But it is further south that they are found in the greatest abundance, thongh nothing like to the extent they are in the North Paeific, on the shores of Behring Strait.

Penguins (Spheniscus Magellunicus) are exceedingly common about herc. Dr. Cunnıngham describes them as standing crect and staring "at us in a stupid manner for a few moments, and then shuffling them, their little wings hanging limp at their sides, and their dark grey and white colouring and reeling movements suggesting a drunk and disorderly funeral procession. When hard-pressed they abandoned the erect position, and crouching down on all-fours, if I may be permitted the expression, ran along like rabbits at a very rapid rate, using their wings as fore-legs, till they gained their burrows, fairly esconsced in which they faced their pursuers, and slowly turning round their heads from side to side, barked and brayed in the most ridiculous manner, offering a stout resistance to being captured by biting most viciously with their strong bills. Whilst contemplating one individual in its den, I was suddenly startled by a loud 'Ho-ho-ho-ho-ho' close to me, and turning round perceived another bird, which had boldly walked out of a neighbouring burrow, and was thus addressing me." It is, however, the cormorant (Phalacrocorax carunculatus) which is the most characteristic, or at all events the most numerous bird of the region. In the island of Santa Magdalena, in the Broach Reach of Mageilan's

[^95]fifty for o Chaco, rodigious d], has a ettlement bles also. e climate here can per, and 1875 the a rescued e vicinity a jubata) fus Fulklands are and then They live ich often capture. sea-birds' years, at possessors couple of undance, Behring ningham noments, cir dark funeral g down ary rapid nsced in to side, to being ting one 3 to me, abouring ecrocorax. ous bird ageilan's

Strait, the same writer describes a cormorant "rookery," as containing the nests of these birds congregated literally in thousands, forming a dense black mass covering a space of many yards. On being disturbed they arose in a black cloud, almost concealing the heavens from view, and waving the air with their wings, so as to produce a sound like a strong breeze blowing, mingled with the discordant screams of skua gulls, which lived in the colony with them. The cormorants' nests were on the ground, arranged in almost mathematical series, exactly a foot of space intervening between each nest. Each was in the shape of a flattened mound excavated on the top, formed of dried grass and other herbage baked into a solid mass with earth and guano, and most of them containing two

to threc greenish-white eggs, about the size of that of a domestic fowl, and with a rough chalky surface. Notwithstanding the abundance of birds, there is no chance of guano in any quantity being obtained in this region. No doubt the ordure of the cormorants and penguins by this time bas accumulated quite as much as on the coast of Peru. But Peru is an exceptionally dry country, and accordingly the guano remains on the rocks, while the southern part of the continent is, on the contrary, exceptionally wet, so that the birds' excrement is swept off the cliffs. The soil must, however, be impregnated with it to such an extent that if there are ever settlements of any extent in these regions, it would pay to dig earth from the vieinity of the rookerics, the position of which is such that the guano cannot have been swept into the sea. The "otter," which ranges from the Chonos Archipelago, as far sonth as the Strait of Magellan, is the Lutra Chilensis, a land species, though taking to the sea for food, and no relation of the true sea otter, of which we have already made the acquaintance in the north (Vol. I., p. 304).

## CHAPTER XVII.

Tie Reptblic or Chili: Geography and History.

Fnom Cape Horn northward the exposed coast is a wild broken arehipelago of islands and fjords, bleak and forlidding, but, when sheltered from the storm, covered with vegetation, and even forests of the usual Magellanic type. Glaciers creep down the valleys, and in some cases discharge icebergs, from their termination, in the sea. The seream of sea-birdsthe albatross, the penguin, and the wingless steamer duck,* which paddles with its rudimentary pinions along the surface of the sea so fast as to well deserve both its modern name and its older one of race-horse-are about the only audible signs of life. Here we see the fjords, which, as we have already noted (Vol. I., p. 71), are, in all probability, the beds of old glaciers; but these entirely disappear when we get beyond the regions of snow and glaciers. The seenery is, however, very fine, and as we go further north gets all the pleasanter, in so far that the great mountain eliffs, and the rushing cataracts which pour down among them, are varied by the parti-coloured foliage of trees, a patch of pasture ground, or a little village peeping out through a gap in the forest. All this time we have been sailing along the shores of Chili, but it is not until we come to the island of Chiloe that we can say that we are fairly within the Republic of that name. Even then the territory is partly Araucanian, and, as we shall see by-and-by, the Indians of this region have never yet fairly given into the whites, and are, indeed, owing to the difficulty of dealing with them, really independent. The island is nearly 120 miles in length, 50 miles in its greatest breadth, and in all contains about $\mathbf{5 , 2 0 0}$ square miles. The seaward, or western shore, is high and steep, but the eastern is lower, and much more irregular in its outline. The interior is mountainons, and dotted with lakes, one of which, the Lago de Cucao, is of considerable size. Ancud, a town of 7,000 inhabitants, is the capital, but though regularly built it is dirty, squalid, and dismallooking in the extreme. The inhabitants seem all tinged with Indian blood, and are not a prepossessing set of people. The voyager, who has arrived from the Strait of Magellan, feels that the jump from savagedom to civilisation is, so far as the physique of the Chiloetes is concerned, not very great, the clothing and other Caucasian surroundings being the chief differences which he detects between the friends he left behind and those whose acquaintance he is now making. The complexion of the people is very dark, and their dress the Chilian national poncho, "over a shirt and trousers generally very much the worse for wear." Most of the houses aro wooden, with steep roofs often thatehed, and "displaying a decply concave curve and projecting eaves." The cathedral is also of wood, and rather woe-begone, but is said to be good enough for the rapacious and profligate priesthood who officiate in it. The streets are steep and very crooked, and, where paved at all, are covered with a causeway of round stones, a day's meandering over which gives the unpractised pedestrian

[^96]some idea of the feelings of the pilgrim who walked to the shrine with unhoiled peas in his shoes. Dr. Cunningham describes hawks and vultures perched on the roof-trees of most of the cottages in the vieinity of the town, great lean pigs, covered with long black hair, prowling about the doors, and unhappy-looking curs barking at the passers by until they are out of sight. Banks of foxglove aro common, and among otker plants the handsome Chilian nettle (Lousa Chilensis), endowed with various stinging properties, is among the more common plants, whieh the almost constant wet weather canses to spring up rankly in every direction. The total number of inhabitants in the island, whieh is a province of Chili, was, in 1875, 64,530. Settled by the Spaniards very soon after its diseovery in 1558 , it was also the last locality where the rule of His Catholic Majesty was maintained: the Spaniards were expelled from Chili in 1818, and did not entirely desert Chiloe until 1820. The fine Chilian cedar (Fitiroya Patagonica), the phanks of which are exported, constitutes its chief riches. Next comes the potato, whieh is a native of the island, and is produced in great quantities in places where the soil is being cleared of forest.* Coal beds have been diseovered on the island, and altogether, notwithstanding its dampness, Chiloe is not the worst part of the Chilian Republie.

## Appealance of Chile.

The country to the north becomes barer, and barer still, the further we depart from the region of frequent rains, to the one where little or no rain at all falls, until at last we sail into the harbour of Valparaiso. At first sightt the "Valley of Paradise," as the name signifies, strikes the disappointed visitor as a sad misnomer. Physically, at least, there are ferw of the attributes oi Paradise about it. Coming from the gorgeous tropies of the north, where the vegetation comes down to the water's edge, from the bright islands of the Pacific, or from the bleak, but still wooded sonth, the country first seen looks bare and uninviting. From the deck of a ship in Valparaiso Bay (p. 25:5) the coast appears very barren, and the weary eye wanders from one sandhill to another for some bit of refreshing green to light upon. But there is no relief from the omnipresent sandy red soil, until, as the baze elears away, the huge range of the Andes, with their eternal caps of snow, and above all the great voleano of Aconeagua, stands out in all its bold relief, from the bare and altogether unimpressive foreground. Chili, in reality, as Sir Horace Rumbold, H.M.'s Charge d'Affuires points out in his masterly report upon the country-and which constitutes, perhaps, the best account of it we have in the English language $\dagger$-is a strip of coast land pent in between nearly the loftiest

[^97]mountains and the broadest ocean of the globe, and containing $2: 00,000$ square miles. It extends for 2,270 miles southward from Peru to Cape Horn-if we recognise Tierra del Fuego as belonging to any one, though, in reality, the Argentine Republic claims it, and England, by right of the toil and treasure spent on its survey, has the best title to it. In breadth, however, it is very narrow, varying from the sea to the borders of

chanco indhass, with " balsas," or bayts of the balsa wood.
Bolivia from 40 to 200 miles. The principal part may be deseribed as one broad valley running north and south, with narrower lateral valleys, each rising step-like above the other, to the foot of the giant wall of the Andes. Then above these fertile valleys comes the Cordillera (Plate XXIX.), with a mean height of 11,830 feet, but with numerous far loftier peaks, among which must be enumcrated twenty-three volcanoes. Greatest of these is Aconcagua, 22,296 feet in height, which is so marked a feature in the view from Valparaiso, Tupungato, 20,269 feet, and Villarica, 15,996 feet above the sea. As a type of the volcanoes, we bave figured (p. 289) the crater of that of Antuco, in the province of Concepcion, close by the Lake of Luja, which laves one side of it . The western slope
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erra del aims it, est title cders of
c broad step-like e valleys pumerons eatest of iew from s a type province rn slope
of the Andes is, however, stecper than the eastern declivity. Henes a journey from Chili to the Argentine Republic is more difficult than a trip in the contrary direction, the mountains to the west descending by a series of terraces, which terminate in the great plains, or


VIEW OF THE CITY OF SANTIAGO, THE CAPITAL OF CHILI.

Pampas, which we have lately left. For eight months in the year, these passes are open, but no wheeled carriages can be used in them-only mules. Indeed, in some of the more rugged ones, the traveller has still to be borne, in a kind of chair, on the backs of Indians, more sure-footed than even mules. Some of the passes are very high, ranging from 14,770 feet, which is the elevation of that of Doña Ana, to the Planchon,

11,455 feet, but that part of the Andes bordering Atacama may be crossed all the year round, snow rarely accumulating to any great extent on the mountains in that direction. In so volcanic a country earth shakings, as might be expeeted, are common. There are frequent tremblores, or shocks, which do no harm, unless they are followed by the terremoto, or actual earthquake itself, though the Chilian opinion is that when there are frequent shocks there need be little alarm about an earthquake, which, in reality, is rather rare in Chili, one occurring only about once in every ten years, and the same province being rarely the focus of such a visitation oftener than about twice in a century.

Lakes fed by little rivers are common in the inland valleys. Most of these abound with fish, and are frequented by aquatic birds. The greatest of them is Llanquihue, 107 feet above the sea, at the base of the volcuno of Osoino, and in length thirty miles by twentytwo broad. Another, a little larger, is Lake laneo, and in the vicinity of the city of Santiago, Lake Aculeo, occupying between 8,000 and 0,000 aeres. The lakes near the const are mostly brackish, while those in the interior are filled with water fresh and pleasant to the taste. The Chilian rivers are in no case large, and few of them are navigable for long distances. They are nearly all fed by the melting of the snow, in the Andes, and are naturally more numerous in the south than in the north of the Republic, where, however, they serve an excellent purpose in providing means for irrigating the land, which would otherwise be barren parched plains. The largest of these streams is the Bio-bio, which flows rapidly from the Andes, and after deseribing a course of 220 milos, falls into the Pacific. It is navigable for barges and small steamers for about 100 miles from its mouth. Minetal springs-chiefly saline and sulphureous-are common, some boiling, and all of them above the ortintry temperature of the soil. In addition to many others, there is at Chillon, in the department of the same name, a famous bathing establishment much frequented by the sick folk of those parts of the world. The establishment is on the west flank of the Cerro Nevada, at a height of 2,050 feet above the sea, and contains in elose proximity cold and hot, sulphureous, ferruginous, saline, and alkaline springs. From December to April, the gouty, the rheumatie, the dyspeptic, and the people troubled with skin diseases floek thither in such numbers, that in its own languid, invalid way, this mountain watering-place enjoys a kind of "season."

## Climate.

Extending through so many parallels of latitude, from the parched deserts under the tropics of Capricon to the moist regions of Tierra del Fuego, Chili has necessarily a variety of soils and climates. In the north is the beginning of that terrible desert of Atacama, which stretches in Bolivia and Peru, dry, fruitless in vegetable products, and repulsive to men except for its mineral wealth (pp. 170, 277, 280). In Central Chili are agricultural settlements, wheat farms which supply the great flour mills of the vieinity of Valparaiso, and the regions in which all the eitics and ports are situated. In the south again-as we have seen-are the forests and lakes of a eold, rainy zoue, which one seareely associates with a country bordering in another direction on Peru, partially under the tropics, and notorious for being rarely visited bra drop of rain. Again we must remember
the year direction. Where are terrewoto, frequent in Chili, rarely the
und with 197 feet twentySantiago, re mostly the taste. distances. naturally ver, they ch would io, which into the from its ling, and ers, there ent much the west $s$ in close December vith skin mountain
ander the a varicty Atacama, pulsive to ricultural alparaiso, tgain-as associates tropics, emember
that about one-fourth of the country is raised very little above the level of the soa, while another quarter of it attuins almost to the limits of perpetual snow. In Middle Chili, June, July, and August ure the rainy months, and during that season the south wind, which blows all the rest of the year, clanges to the north, varied oceasionally by a dry breeze from the east. In Suntiugo (p. 273), the capital, the mean annual temperature is $55^{\circ}$ Falurenheit. In Valparaiso it is a little higher, and in the more elevated regions somewhat lower. In the province of Coquimbo there are "four or five showers of from five to ten hours," and at Atacama only an occasional mist. The Chilian spriug begins in September, the summer in December, the autumn in March, and the winter in Junc. Nearly all prolucts of temperate and sub-tropical regions, therefore, prosper in some part of the country. Valdivia and Chiloe, for instance, export timber, potatoes, wheat, rye, barley, and flax, Concepcion and Aconcugua, where irrigation is neeessary, flax, maize, grapes, figs, olives, peaches, and melons, and the northern parts oranges and lemons.*

## Ihistony.

Who the early inhalitants of Chili were, cannot now be clearly made out, for long before the advent of the Spaniards the aborigines had got mixed up with the Peruvians, who had gained the mastery over some portion of it, and Quichua words had crept into the Chilian dialects. The name of the country-Chili or Chile-is not derivel, as is sometimes stated, from "the Peruvian word tehile, snow," rili being the Quichua name for this substance, but most probably from cheri, cold. It is believed that the Peruvian Incas first began the conquest of Chili about a.d. 1460 , but found their mateh in the warlike Purumauca Indians, who, being joined by the Pancones of the Arancana, and the Cauquenes, compelled the invaders, after a desperate battle of four days, to retreat, and fis the southern limits of their empire at the river Maule. The Spaniards began their conquests soon after their arrival in the country, but were for some time unsuccessful, and it was not until 1541 that the famous Pedro de Valdivia founded the city of Santiago on the Mapocho, and so became the first permanent settler in Chili. Three years before his arrival a young soldier, Juan de Saavedra, discoverel the harlour of Valparaiso, and, in honour of his native village in Spain, gave it the name is now bears. But he was never destined to see his home again, for he was hanged in Lima by the crnel Carbajal. This name Valdivia, however, contirmed, and made the place the port of Santiago. How the Araucanians rose, the battles which ensued, the treachery of Lautaro, and the final capture and death of Valdivia, the conqueror of a country, for the time being, and the foumder of a score of towns and furtified settlements, form most romantic episodes in the works of the early ehroniclers. Henceforward, for 180 years, there was savage warfare between the Arancanians and the Spamiards, who had always great difficulty in holding their own with the race who, up to the present time, have maintained a partial independence, and within late years have again essayed the arbitrament of hattlo with the descendants of the conquistadores, who, after gaining their own freedom, were

[^98]disinclined to grant the same boon to the warlike aborigines, who had merited the recovery of what they had only purtially lost infinitely better than the Chilian whites themselves.

It is from these carly conquerors that we know about the primitive inhabitants of Chili. Even then it is little that wo can gather from their inconsequential, albeit often guaint and graphic narratives. Of this mach we are certain: the valleys of Central and Northern Chili were inhabited by a people more allied to the Araucanos, or Araucanians, than to the Incas, while along the coast dwelt a peculiar tribe of fishermen called Chancos (p. 272), who, Mr. Markham tells us, ure yet to be met with at Cobija and other parts of the Atacama desert. In the latter region there is still a trile with a peculiar language, vocabularies of which have been collected, und which is quite distinet from Quichua or Aymara (p. 1s0). These Chancos aro in ull probability only northern offsets of the Araneanians, as their language is much the same.* The next two hundred years were occupied in continual guerilla warfure with the Arancanians, with the result that sometimes the one, sometimes the other, were vietorious. For instance, in 1599, Martin Garcia de Loyola, the Governor of Chili-which was under the Viceroyalty of Peru-was slain by the Araucmians. He was the nephew of Ignatius Loyola, and the husband of an Inea prineess. In that year, also, the towns of 'aldivia, Imperial, Angol, Chillan, and Concepeion were destroyed, the male inhabitants killel, and the women earried away into captivity. At last-in 1610-through the intervention of the Jesuit missionaries, a truce was made with the Araucamians, and for a time the land knew peace. Meantime, Central and Northern Chili were getting settled, towns were inereasing, and $\cdot \mathfrak{a}$ trade with Peru was springing up. The settlers were chiefly from Aragon and Biseay. The climate was far more plensant than that of most other parts of the Spanish Empire in America, and though there were not to be made in Chili the fortunes which the adventurers to Peru and Mexico accumulated, yet the appointment of Captain-Gener: 1 was coveted because it was a stepping-stone to the vice-regal throne of one of these countries. Hence we find that several of the rulers of leru were originally enguged in the administration of the Chilian provinees-among others de Cañete, de Superunda, Amat, Jauregui, and O'Higgins. Brief as must be our sketch of Chili, it is impossible to pass over the name of the latter remarkable Viecroy. As his name tells, O'Higgins was not to the Spanish manner born. Liko many another soldier, famous in the annals of both new and old Spain, the future Grandee was of Irish blood, birth, and breeding. It does not appear that he was even descended from one of the multitudinous monarchs who figure so extensively in Milesian history, and who, judging from the innumerable multitude of those who elaim deseent from them, must have left behind prodigions families. Ambrose IIiggins was in reality a peasant's son, and his first connection with the aristocracy was to carry letters to the post for Lady Bective, of Dangan Castle. But young Higgins had an uncle a priest at Cadiz, who took charge of the "gosoon's" education, and in due time despatehed him to seek his fortune-or to die in South Ameriea. At first there seemed much more likelihood of his accomplishing the latter alternative than the former, for the profits of the little shop which he opened under the walls of the Lima Cathedral was but a poor foundation on which to build the superstrueture which he afterwards reared. Indeed, the shop did not

[^99]recovery s. mbitunts cquential, alleys of canos, or ishermen t Cobija with a distinct northern red years sult that , Martin eru-was sband of Chillan, ied away naries, a Teuntime, ade with e climate America, turers to $d$ because we find 11 of the Higgins. he latter ner born. main, the he was sively in ho claim was in y letters uncle a espatehed ach more ts of the undation did not
pay, and so he left Pern for Chili in 1760, and having shown some engineering talent, received a commission in the Engineers sent to strengthen the fortifications of Vialdivia. From

clump of cacti in the degert of atacama.
a small success he advanced to a greater. He punished one tribe of Indians, and then conciliated another, until what with fear and what with the "blarney," which national quality never deserted him, Higgins went on until he had won over most of the refractory tribes of Chili. The wisdom of his policy was recognised by the king making him colonel,
and Count of Ballenar. Then it was that the $O^{\prime}$ began to appear before the ex-postboy's name, and who also about this period scems to have discovered that he was descender from some Hibernian noble of whom the heralds have kept no record. Soon after we find him installed Governor of Concepcion, where he entertained La Perouse, who wrote so strongly in his favour that Louis XVI. of France applied to the Spanish Government for his promotion. So in 1788, General Ambrose O'Higgins, with a new title of Marquis of Osorio, in addition to his old one of Count of Ballenar, became CaptainGeneral of Chili, and entered Santiago in triumph, just nineteen years from the day when he first appeared in Chili as a bankrupt tradesman in search of bread, and something to do. O'Higgins still lives in the memory of his adopted countrymen as one of the best rulers that Chili ever had. He ameliorated the condition of the labourers by suppressing the "ecomiendas," or fiefs, made the road from Valparaiso to Santiago, and all the time he was occupied with the high affairs of State, sent home money to his poor relations in Ireland through Father Kellet, the parish priest. Finally, he became Viceroy of Peru, thirty-three years from the date of his landing a friendless adventurer, and after holding office for four years, died in 1801, over fourscore. No man ever served Spain more faithfully, and yet did more for the colonists themselves, than this man of Irish descent and humble antecedents. To the last he had many of the virtues, and a few also of the weaknesses, of his race, and though he never again saw the green isle he loved so well, yet the tradition of his strong Irish brogue and his kindly heart is still fresh in Lima and Santiago. It is curions to find that in two critical crises both Peru and Chili were ruled by men of Irish birth. At the time that O'Higgins was carving out a career for himself in Chili and Peru, O'Donoghue was doing much the same in Mexico, in which country he died in 18:2, as Viceroy. General O'Reilly, who commanded the Spanish army at Cento, as well as Count O'Reilly, commander-in-chief of the Spanish army, were, it is needless to say, countrymen of O'Higgins, and not to enumerate the hundreds of less noted officers who fought in the War of Independenee on both sides, it may be added that lieldMarshal Coppinger, also an Irishman, was the last man who held San Juan de Llloa for the king.* O'Higgins' son was that Bernaruo O'Higgins who, next to his father, is about the greatest name in the annals of Chili. He was Generalissimo in the War of Independence, and for some time Dictator, though he died in exile, having experienced the ingratitude which Chili, like the other Spanish Repullies, accorded to those who spent their lives in her service.

The story of how Chili attained her independence is at first eventless, for freedom came to her almost without striking a blow. The country simply took advantage of the disturbed state of affairs in Spain to throw off the yoke of the mother country, summon a Congress, and pass many excellent laws, reforming the load of hideous abuses which had grown up under the Spanish rule, but, as $I$ have shown in another place, leaving some of the worst untouched, the people having been so demoralised by long misrule as to have lost, to all appearance, the art of seeing such matters in their true light. Affairs, however, seemed likely to prosper favourably, when the

[^100]the ex-postfas descended after we find ho wrote so Goverument new title of me Captainhe day when something to of the best suppressing all the time por relations Viceroy of er, and after Spain more Irish descent $v$ also of the ved so well, esh in Lima ili were ruled r for himself hich country ish army at , were, it is of less noted 1 that rieldde Clloa for is father, is Var of Indeexperienced e who spent
for freedom dvantage of her country, leous abuses other place, oralised by matters in when the (1878).
ambition of three brothers, named Carrera, wrecked all that bad been attained so easily. They and their followers forcibly dissolved the Congress, and made themselves arbitrary rulers. This gave an excuse for the Peruvian Viceroy to interfere, by marehing troops into Chili, and after much variable fortune, succeeded in thorougbly routing the patriots, and reinstating the rule of the King of Spain throughout Chili. "For three years," writes Mr. Markham, "Spanish power was again dominant in Chili. Osorio entered Santiago in triumph, where he arrested many of the principal citizens, confiscated their estates, and sent them prisoners to the island of Juan Fermandez. His troops indulged in unrestrained robbery and licentiousness, and his suecessor, Mareo, even excelled Osorio in tyranny and oppression. But the people were unsubdued. A barrister, named Manuel Rodriguez, raised bands of patriot guerillas in the north, while others, under Freyre and Neira, seized Talea, and harassed the Spaniards in Sonthern Chili. In 1866, San Matin, the Argentine General at Mendoza (p. 220), matured and executed one of the most brilliant military mancuures of this century. He resol:ed to cross the Andes with an invading army, and drive the Spaniards ont of Chili. His first aim was to divert the attention and divide the forces of Mareo by making him believe that the attempt was to be made by the pass of El Planchon to the south, opposite to Talea. With this olject he went from San Carlos to Mendoza, and held a grand palaver with the Pehuenche Indians for leave to march through their territory to El Planehon. The news reached the Spanish Captain-General, who sent a large detaohment towards Talca. The real intention of Gencral San Martin was to cross the Andes by the Pass of Uspallata (p. 213) to Aconcagua, north of Santiago. The army left Mendoza on the 17th of January, 1817, consisting of 3,000 infantry, 960 cavalry, the staff and hospital train, besides workmen. All the men were mounted on mules, of which there were $\bar{i}, 359$ for the saddle, and 1,922 for baggage. The provisions consisted of jerked beef, seasoned with capsieum, toasted corn, biscuit, cheese, and onions. The field-pieces were slung between two mules when on tolerably smooth ground, but often it avas necessary to drag them on sledges made of dried bulloeks' hides, called sorras, and even to hoist them up very bad places, or lower them down with derricks. Depôts of provisions were formed at every twelve leagues. The suffering of the troops were very severe; all suffered from the rarefied air (p. 175) and intense cold, and several died," the Pass being 13,125 feet above the sea, and the limit of perpetual snow in that latitude at about 13,000 feet. The result of this expedition was that the Spaniards were defeated, and Bernardo O'Higgins elected Supreme Dietator of Chili. No attempt to re-oust them proved suceessful, and on the 3 rd of April, 1818, the battle of Maypu, in which the Spaniards were utterly ronted, may be said to have completed the independence of Chili. Aided by Miller, Cochrane (Lord Dundorald), and other foreigners in their service, the "Patriots" carried point after point, until, in January, 1826, the Spaniards were driven out of their last stronghold in the island of Chiloe. The actual independence of Chili, though usnally dated from 1810, is thus only about a century old. In that interval the country, though not without troubles from within and without, has on the whole progressed wonderfully. There have been occasionally civil broils of the usual Hispano-American type when a new President las been installed, and an old one's adherents, or the friends of a rival candidate, have been disappointed at the result. There
have also been one or two troubles with Peru, and the neighbouring Republics, not a few little wars with the Armeanian Indians, and in 1864 one of short duration with Spain, the nature of which was peculiarly disgraceful to the attacking power, and perhaps not altogether. to the loss of Chili, since the resistance then made is likely for ever to save her from further molestation. The result of the stability of the country is, that it has gained an amount of respect from foreigners which has been accorded to few-if any-of the other South American Republics. The Government is not withont its faults, but it has the all-redeeming virtue of paying its debts, and reaps the reward by standing well on all the Bourses of the world. Contrary to what is the case in most of her sister nationalities, white blood predominates in Chili : hence the superiority of the people. They may not be

the hailway in the desent of atacama.
deficient in may of the viees and the apathetic listlessness of their race, but they are pleasant-mannered, kindly, not withont enterprise, and so far understand the principles of good government, that they have ceased to imabine that any nation can be prosperous with militaryism unscotehed, or that a community can be well ordered, or be trusted with free institutions, in which the civil element is not the supreme one.*

## Resocraces.

Silver, groll, copper, iron, lead, nickel, cobalt, borax, gypsum, nitrate of soda, and roek salt, are among the mineral resources of the Republic. In thirty years, from 1813 to 1873, the silver mines of Atacama yielded anuually on an average $£ 1,320,000$. In the

[^101]not a few Spain, the altogether her from gained an the other $t$ has the ell on all ionalities, ay not be

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and rock 1813 to In the

Department of Freyina, in the southern part of this district, is one of the greatest copper mines in the world, the adjoining province of Coquimbo being almost as rich, while the large copper smelting works of Urmeneta and Errazuriz and the rich mines


MONCMENT AT SANTIAGO TO THOSE WHO PERHIED DURING THE BCRNINO OF THE CATIEDRAL IN 1863.
of Carrizal, Panulcillo, and Tamaya, constitute a great source of the wealth of Chili. Most of the region is rather barren, but the highly cultivated vale of Huasco is not excelled in productions by any portion of the country. In Central Chili, Aconcagua is accounted the garden of the Republic, as well as the settled regions of Santiago, Valparaiso, Colchagua, Talca, Maule, and Nuble, where are situated the finest cultivated estates, the most important
towns, and generally the finest farming country, just as in the north are to be found the mining regions, and in the south the pastoral country. South Chili commences at the River Itata, and includes the provinces of Concepcion, Arauco, Valdivia, Llanquihue, and Chiloe. It is very wild, the Araucanians being only partly subdued, and, in reality, in many parts of it absolutely independent. Coal-fields, great forests, good grazing land, and regions on which, notwithstanding the moisture, many kinds of vegetable products can be cultivated, may be mentioned as the characteristic of this part of Chili. There are German colonies at Valdivia and Port Montt, as prosperous as a colony of thrifty Germans in the New World usually is, but hitherto the country has not proved to possess many attractions for immigrants. The coal-fields of Chili, though not containing the best quality of material, are yet amond the most extensive in the world, spreading along the coast from the province of Concepcion to the Strait of Magellan, where we have already noted their existence, and are yet destined to have a great influence on the future of the country. Of the entire metal export, seventy per cent. is copper, and twenty-five per cent. silver. The coal dug is so rapidly increasing in amount, that within a short time most probably nearer $3,000,000$ than any smaller number of tons will be the output of the Chilian pits.

Chiili is about equally an agricultural and mining country, forty-four per cent. of the exports coming under the head of mineral products, and forty-six under that of agricultural, the remaining moiety being manufactures on a small scale, and such-like. The competition of California has forced the Clilian farmer to look to his profits, by discarding the exceedingly primitive implements which, for three hundred years, had satisfied the agricultural wants of his fathers. In the place of the plough made of pointed sticks, the oxen and mares to tread out the corn, the rude winnowing by the wind, and the primitive mills, Chilian "ranchos" are now supplied with the most approved machinery from England and the United States, while the flout mills are quite equal to any but the very finest in Great Britain or North America. Yet Chili can never be a great agricultural country, as about eighty-two per cent. of it is desert, mountain pasture, and forest, and only eighteen per cent. of the remainder arable land. Wheat is the chief product, the returns being for the whole country seven for one, and of the average yield of $1,350,000$ quarters, about two-thirds are exported either in grain, flour, or biscuit. Barley, maize, kidney-beans for the national frijoles, pease, potatoes, walnuts, olive-trees, mulberries, vines from which are made indifferent "claret" and "port," a coarse brandy, and various other beverages of about equal value, lucerne, \&c., are among the other agricultural staples. Of the timber of the Chilian "cedre" we have already had occasion to make the aequaintance in passing Chiloe on our voyage from the south. The cypress (Libocelrus), the quillay (Quillaja), the laurel (Lauretia), the lumo (Myrtus), the espino (Acaciu Cureuiu), the Chilian oak, or roble, in reality a beeeh (Fugus obliquu), the liague (Persea), the peumo (Ciyplocarya), and the Chili pine (Arancaria imbricatu), may be mentioned among the first trees from which either timber, or timber products, are got. The lastnamed is the "monkey puzzle," and probally the Chilian tree, which is most familiar to us in England, as it is a common ornament of almost every shrubbery. It grows in its native country to the height of 150 feet, and when seen from a distance looks like a gigantic umbrella. The cone contains seeds alout two inches long, which, when cooked,
found the s at the hue, and in many d regions ultivated, olonies at cw World migrants. et amond oncepcion are yet ire metal dug is so 000 than that of such-like. rofits, by ears, had made of gr by the approved equal to e a great ture, and the chief average or biscuit. live-trees, e brandy, her agrieasion to e cypress he espino te lingue nentioned The lastmiliar to ws in its ks like a cooked,
form a delicate dish. 'The timber is grod, and under the rule of O'Higgins, the trunks were used for ships' masts, but nowadays the increased exiense of labour prevents them from leing brought to the coast with any chance of profit. It belongs to the same genus as the Bunya-bunya pine of Australia, the seeds of which are also eaten, and the Norfolk Island pine, and is also represented by Araucaria Brasiliensis, which grows in great forests in the south of Brazil. The apple orehards of Valdivia are celebrated, but it is not until we come into more northern-and, of course, in this sonthern latitude-warmer regious, that we find pear and peach groves. The strawberries of Tome, in South Chili, bear a great reputation throughout the country. Flour mills, smelting works, tanneries, brewerics, rope-walks, and soap works, are among the few manufactures whieh the sparse population and eorrespondingly high rates of labour have allowed of, but wine-making and other industrics are gradually making way, and will, in time, assume respectable proportions. Valparaiso and Santiago are large cities where nearly every branch of commerce is carried on, and where most of the luxuries of civilisation, though not all the comforts, may be had by those who can afford to pay extravagantly for them, for Chili is essentially a dear country for the Luropan to live in.

Guanacos, vicuñas--closely allied to the guanaco-otters, wild foxes, elinehillas, and other wild animals are numerous in the less settled parts of the country, where also the puma makes much anathematised ravages in the farmyard. Chilian jerked beef is, if anything, a little more toothsome than that unsavoury delicaey usually is. The horses can endure more than those of England, but Messrs. Black and Walters consider then inferior in strength, as they undoubtedly are in height and swiftness, to those of this country. The birds are numerous, and many of them have already been mentioned, or may be yet noted. They are naturally, in many respeets, the same as those of the Strait of Magellan, Bolivia, and La Plata. The fishes of the Atlantic and Pacilic are, however, in many instances, different, even in the same latitude. Those off the coast of Chili are numerous. Of these, the pichilnen, of the Bay of Coquimbo, is considered a great delicacy. Shell-fish are abundant, but with the exception of the small sweet oysters * of Chiloe, large mussels $\dagger$ - the "choros" of the Chilians-clams, and coekles, it needs an acquired taste before most of them ean be appreciated. All the reptiles are harmless, and of the insects the small ants, whieh enter houses and destroy provisions, are the most annoying. The locust, which proves a sad pest now and then to the Argentine Republic, does not infest Chili. Chili, it will therefore be seen, has little of the tropics about it. In fact, though lying in sueh elose proximity to sulbtropical countries, it is as a whole not nearer the equator than many parts of California, and, of course, its southern regions are less than temperate. It is only in Chiloe, Valdivia, and Lanquilne that exuberant vegetation is seen over any great tracts of eountry. There the luxuriance of plant life is almost as great as in the tropies. "The forests are frequently quite impenetrable on account of the creepers and the 'quila,' a rudely-branched reed, which, however, affords a good food for the cattle. A creeper (Lardiabala biternata) is used by the Araucanians instead of ropes. In the same districts grows likewise

[^102]the coliguë or coleu (Chusquea Coleou), a bamboo-like reed, which attains a height of thirty fect, and furnishes the shafts of the lances of the Araucanians and Pehuenches."

## Revenue and Trade.

The budget of 1876 , for ordinary expenditure, was $£ 3,366,080$ : of this sum $£ 636,096$ was for the military and naval expenditure. In 1874 , the ordinary revenue was $\mathfrak{f 3}, 132,31$. In 1875 it yielded $£ 3,220,000$, and in 1877 it was estimated at $£ 3,380,741$, so that in round numbers the income and the expenditure of the Republic may be ascertained from these data. Great sums are being expended on public works, which are expected to be remunerative, but, as in the analogous case of ludia, this extraordinary expenditure disturbs the equilibrium of income and expenditure. Unlike some South American countries entire dependence is not placed on the Custom House as a source of revenue. The national income is derived from various sources. Two of these, namely, the tobaceo monopoly and the alcabalas-or taxes on the transfer of property-are survivals from days of Spanish rule. There are also taxes on income derived from land, trade, and other licenses, and the remainder, and by far the greatest amount, as usual, from the Custom House. The total Chilian debt, from the latest estimate at my disposal,* is $£ 9,206,200$ (foreign), and $£ 3,383,204$ (home), or about four years' revenue. The charge for interest and amortisation of the foreign delt is about $£ 431,300$, and for internal debt $£ 161,751$. The first money was borrowed in 1822, and expended on revolutionary schemes. The interest on this sum-somewhat in arrears-was in 1842 capitalised at $£ 757,500$, with interest at 3 per cent. But since that time perfect good faith has been kept with the public creditors. In 1558 Chili raised a loan of $£ 1,504,500$ in London, and in 1866 the war with Spain compelied her again to come into the market, seeking the wherewithal to
 £2,000,000 at 6 per cent., and in 1870 she contracted another loan-this time for $£ 1,012,700$ at 5 per cent., to construct a railvay from Chillan to Talcahuano. Next, in 1873, $£ 2,276,500$ at 5 per cent. was obtaincd to build the line from Curico to Angol, and finally, in 1575 , $£ 1,900,000$ was contracted also for railroad schemes. The whole of these loans are to be redeemed at par by a sinking fund of 2 per cent. "The credit of Chili," writes Sir Horace Rumbold, for many years past British Minister at Santiago, "stand 'ecervedly higher than that of some larger and more powerful States," though the tenderey to borrow for the construction of remunerative public works is a vice that cannot be too carefully watched. The foreign trade of Chili, whieh averages about $£ 14,000,000$, is chiefly with Great Britain, and though, owing to recent commercial depression, it has shown a decrease, yet, on the whole, it may be said to be healthy. Still, every year, since 1872, the exports from Chili into Great Britain and vice versä have shown a steady decrease. Copper is naturally the chief export to England, the amount, in 1876, being valued at $£ 2,096,190$. Then comes wheat, and after that wool. Britain, on the other hand, sends cotton and woollen manufactures and iron, the whole, in $\mathbf{1 8 7 6}$, being valued at $£ 1,945,791$. Railways are spreading throughout the country. At the end of June, 1877, there were

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nearly 1,000 miles opened for traffic, and 209 were in course of construction, and nearly finished. The ships which visit Chili are also chiefly English. In 1875, 2,401 English vessels entered Chilian ports, compared with 157 German ones, 95 French, 101 Italian, and 318 from the United States. The Chilian army is made up chiefly of volumtecrs and by conseription, and numbered last year 3,516 men. The navy, in 1877, consisted of ten small steamers, and two very powerful ironclads of the first class, which, in the ceent of the country being again attacked by sea, are confidently expected to give a very good account of themselves.

## Tie People.

Chili is divided into sixteen provinees, which have in all a combined area of 132,000 square miles, and a population, by the census of 1575 , of $2,075,971-(1,033,974$ males, and $1,041,007$ females). But as this census does not include the Indian population, and about 10 per cent. which in other ways were omitted, the population of the country at the date of the census is usually considered to have been about $2,333,508$, exelusive of the Araucanians, Patagonians, and Tierra del Fuegians. The urban population was 725, 190, and the rural $1,350,481$. Among the non-Chilian inhabitants, 7,183 were born in the Argentine Republic, 4,678 in Germany, 4,267 in England, 3,314 in lrance, 1,983 in Italy, 1,223 in Spain, 931 in the United States, 831 in Peru, 383 in Austria, 318 in Portugal, 282 in Bolivia, 175 in Sweden, \&c. The most thickly inhabited city was Santiago, which (ineluding suburbs) contained 150,367 . Valparaiso contained 97,737; Chillan, 19,04; Conncepcion, 18,277 ; Talca, Serena, Copiapo, and Quillota, all the four latter being over 11,000 , and the first over 17,000 . The others are all below 10,000 . In this number we have not included the Araueanian Indians, whose name has so frequently oceurred in this sketch. They are said to number 50,000 , though the estimate is often given very much higher ; * lut it is impossible to say for certain. In 1802 they were formally absorbed into the Republic, but in their own region in the south they still maintain an independence more or less real. Some years ago a notary of the French town of Perigord, with a soul above parelment and pounce, wandered away so far afield, and either got himself elected, or declared that he did-which was perhaps eventually the same thing-and thenceforward assumed most royal state. Not content with his savage monarchy he, in 1870, stirred up his quasi-subjects to war with Chili, and, driven out of the country, came to Europe to seek recognition-and raise money. He did neither, and after a chequered career, like many another jaded wanderer, sick at heart, and bitter with disappointment, he erept home to die in the hospital of his native town. Those who are curious about M. "de" Tounein's carcer, and at the same time feel an interest in one phase of human nature, may have both gratified by the perusal of a curious account he wrote of his own life. $\dagger$ The Araucanian country comprises an area of 25,000 square miles; Los Angelos, the capital, has a population of upwards of 4,000 . The inbabitants cultivate maize, breed horses, sheep, and cattle, weave coarse woollen cloths, and live in comfortable cottages, the beams of which are bound together with regetable

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132,606 H males, ation, and ountry at ve of the 725,190 n in the in Italy, Portıgal, go, which 14; Con1,000 , and t included They are * but it Republic, re or less parchment ad that lie nost royal uljects to tion-and wanderer, tal of his same time perusal of s an area of 4,000 . en cloths, vegetable
creepers. Many of them are Roman Catholies, but the majority are said still to helieve in their great god Pillan, the creator and the ruler, and in numerous minor divinities. They have neither temples nor priests, and perform the rites of their worship by sacrificing some animal under the shade of the sacred Winter's bark tree. The Arancanimus are also great believers in sorcerers, and consider that every death, other than by old age or violence, is caused by the evil influenee of some person, who has bewitehed the dead man or woman. It is therefore incumbent on the friends of the deceased to expiate his manes by cloing vengeance on the individual suspected of haviug brought him to his latter end. Hence the Vendetta flourishes in Araucania. Though the majority of the inhabitants are Roman Catholies, yet there is, and has been for some years past, perfect religious freedom in Chili, and all creeds have alike a right to exereise the outward observance of their faith without let or hindrance. However, as in most Spanish American countries, the churches are frequented chiefly by the women, who have a monopoly of the real piety of the country. As for the men, though nominally "good Catholies," they in reality hold the opinions which, correctly or not, are ascribed to the "French School," and perhaps not unjustly eutertain but an indifferent regarl for the priests. An exception to this rule must be made in behalf of the peasants and miners who, like their class almost universally over the world, are very superstitious. Every year upwards of 20,000 people-the greatest devotees among whom are miners-pay pilgrimages to the Church of Andacollo, a small village in Serena, the object of adoration being a small, but it is understood particularly miraculous image of the Virgin. At the yearly festival, occasionally presided over by the bishop of the province, the image is carried round the square in procession, every spectator at the sight of it dropping on his bended knees. Large sums of money are presented to the Church, and altogether the slorine of the Mulire de Dios at Andacollo is not the least luerative of the ecelesiastical milch cows of Chili. Govermment-both local and centralis conducted, so far as $I$ have been able to learn from books and privite information, with rather more purity-than is the rule in the New World. Justice is fairly dispensed, the law courts and the legal system generally is much superior to that which prevails in almost any European country, and education is in a prosperous condition, the sum expended on it in 1876 being $£ 233,414$. In Santiago 1 in every 3.8 of the population can read, and 1 in every $4 . \pm$ can write. The educational status is uearly the same in Atacama, Coquimbo, Valparaiso, Concepcion, and Chilce, while the average of people throughout the whole country who can read is 1 in 7 , and who can both read and write 1 in 8. One child for every $2 \pm .71$ inhabitants goes to school, and each child in the public schools costs the Government an average of forty-five shillings. These statistics, which I owe to Messrs. Black and Walters' account of Chili, are "dry'" but express a great deal in very small space. Hospitals and other benevolent institutions are found in considerable numbers, and are liberally supported both by the Government and people, though, in proportion to their number, more by the foreign residents than the natives. The people cannot be very moral, for there are no less than four foundling hospitals for a scattered popnlation, onefourth less than that of London, and in addition to several prisons, and a house of correction, a capacious penitentiary, which seems to be always well filled, as it figures in the estimate for $£ 23,000$ per annum. The press is not high-class. A tendency to
rodomontade in all things, and in polities to a municipal view of affairs, are the prevailing fuilings of the Hispano-Ameriean journalist. There are about fifty papers and magazines published daily, weekly, and monthly, in addition to English and German prints. There is nothing very striking in Chilian literature. The country has produced some good listories of the Wars of Independence, but the books composed by Cbilians are almost invariably mere reflections in style and idens of the more popular French writers. The scientific authors are, with very few exceptions, foreigners, or men of foreign descent. French literature is more popular than English in the proportion of three to one, three times more French books being imported than English ones, and ten times more than from Spain, the United States, or Germany.

There is not much distinctive in the Chilians' character. That is to say, their habits, ways of thought, and general social surroundings, do not impress a traveller who has visited, or resided in, any of the other Spanish American Republics, as having much peculiar to themselves. They "hold the same position to Spain as the inhabitants of the United States do towards England. Their instincts and language are Spanish, modified by admixture and intercourse with other nations. The conventionalities of social life are the same in Chili as in France, Belgium, and Catholic Germany : and this remark applies to dress, living, amusements, and propensities. Sunday is spent as a holiday, and enlivened by festivals, balls, theatricals, and concerts. Cricket and athletic sports are unknown, but good horsemanship is common. The very great extent of seaboard not ouly induces large numbers of the inhabitants to visit foreign lands - calculated to average 78,000 - but promotes the diffusion of the civilisation of the most highly cultivated nations over the whole of Chili. The beautiful provinces of Valdivia and Llanquihue are colonised ly Germans and North Americans, who prepare timber, meat, checse, butter, beer, cider, and leather. The university and the learned professions have ever numbered among their distinguished members Polish, French, German, and Englishmen of science. The North American colonists have been chiefly instrumental in the construction of flour mills, telegraphs, and railways. At the commercial centres, such as Valparaiso, Concepeion, Copiapo, Coquimho, and Huasco, many of the leading Chilian citizens are of English, French, and German desent." Altogether it is calculated that in the country there are 39,000 Europeans, clicfly Germans, French, and English. Yet, thongh Chili owes so much-as, indeed, do all her neighbours -to foreigners, she is by no means inclined to yield anything to them. They must come to her-not sle to them (except, indeed, when she wishes to borrow money). As a specimen of this Chilian Chauvinism, I need only mention the fact that no foreign medical practitioner, no matter how distinguished he may be, or satisfactory his proofs of training, can practise without undergoing a fresh examination, ab initio, in all the branches of medical and scientific knowledge before the University. It is to be hoped that Dr. Sangrado is unknown in Chili. Chili is, however, take it all in all, perhaps the Spanish Republic in which the Europeans can most fittingly find a home. It is more free from internal disturbances than any of the others. The people are, if anything, more liberalminded, and the climate more healthy. The time when most deaths occur is in December and January; when the heat is great, and the consumption of water-melons something meredible. Then dysentery prevails. The wettest provinces, which are also the most
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monthern, nre the heulthiest, and the period when least sickneas prevails just hefore the mans set in. Ginstrie, typhoid, and typhos fevers-iluo to the miserable system of Iminago -are the most fatul disorders. In most of the Chilian towns the sewage is carried down the street in purtially open druins passing through the lomses, somatimes filled with water, at other times nearly dry. There are, however, an intermittent ferers, und, curimsly enough, Asintic cholera has not get pussed tho Audes. Diven Vilparaiso is not so well


VISW OF THE VOLCANO OF ANTTCO, GILLI.
Arained as from its situation it might be. Both Santiago and Valparaiso, 117 miles apart, are provided with tramways, fine hotels, and altogether have such a Europan aspect that occasionally it is very diffienlt to imagine oneself in a South American town, especially if the visitor has previnusly hal a little experience of some of the peculiarly national towns lying to the north. lew priests are to be met with in the street, bat to make up for this exception to the rule of Spamish American cities, the number of people in muiform is always rather great, the Chilian not being deficient in that vanity, which consists in arraying himself every now aul again in parti-colonred raiment. In reality, however, most of these seeming soldiers are vigilantes, or policemen, who have a peeuliar
halit of keeping up what Mr. Spry calls "an eternal whistling as they saunter lazily along, thereby carefully warning any evil-doer of their approach." At night, especially, do these bone whistles resound, as signals from one policeman to another, or as aids to the gratification of the official vanity of the vigilante, who is, nevertheless, by no means a very efficient guardian of the city. Every house has a flagstaff, and in the better-class buildings are devices in gas pipes, in readiness for those official illuminations and jubilations of which the authorities are so fond, that they fine all who do not take part in them. Tho poliee regulations are absurdly severe : even the offence of dropping a piece of paper twice in the street is punishable. After dark no hired boats are allowed to leavo the shore, and after nine a pass is requisite even to land. On the outbreak of a fire, the occupant of the house is taken into custody, and detained until he can prove that the fire was not the result of carelessness. The business men are mostly of Euglish, German, or American nationality, and judging from the busy streets, the crowds who come to listen to the military bands, or to promenade in the delightful evenings after the sun goes down, life is taken very easily in the Valley of Paradise, notwithstanding the fact that as ships and steamers of all sizes are coming and arriving almost daily, Valparaiso is a busy place.

Santiago, the capital (p. 273), containing 180,000 inhabitants, is deseribed as even a finer city, with public buildings worthy of a European town. It is at the western base of the Andes, 1,800 feet above the sea level, or ninety miles E.S.E. of Valparaiso. The phain on which it stands is one of the most fruitful in the country. The climate is delightful, and the view of the Andes, which can be seen from any part of the eity, is very maguificent. The city is built in squares, and the houses are generally low, and running round the four sides of a court-yard, intended as a place of refuge during earthquakes. Of late years, however, the more fashionable, or less timid residents, have taken to erecting fine three or fourstorey houses, with a fuccule to the street, and a style of ornamentation rather too costly for a building which may at any moment be shivered to pieces by one of thoso earth shocks to which Chili is, as we have seen, periodically subject. On the 8th of Decomber, 1863, while the church of La Campania was full of worshippers, it caught fire, and 2,000 out of the 3,000 people-mostly women-who formed the congregation were either burnt to death, suffocated in the smoke, or killed by the falling rafters. The engraving on page 281 gives a view of the monument which was ereeted to commenorate this most terrible incident in the history of the Chilian capital. The mint-in which are also the Presidint's palace and the Government offiees-the university, the normal school, the museum, and the cathedral, are the chief public buildings, white cool fountains and shady walks-such as that of the Alameda-are plentiful in this pleasant town of Saint James of Chili.*

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# Cliapter xvili. 

The Repcblic of Plac: Its Geograpify.

Perv, Mr. Spenser St. John, the British Minister to that country, justly remarks, is "one of the most curious countries in the world, whether considered under its geographieal or climatic aspects." Immediately north of Chili, and physically lying under somewhat the same conditions, it is yet in other respects entirely different. In the first place, as it stretches between $3^{\circ}$ and $22^{\circ} 10^{\prime}$ south, it is within the tropics, thoughe its climate differs in many partienlars from that of other regions in the same latitude. Most countries usnally strike the traveller, who sees them for the first time, as something very different from the ideal which he had formed regarding them. Peru is especially disappointing. The luxurious city of Lima (p. 293) pervades the imagination of those who have read the early history of the country, while the gold and precious stones of the lncas, they are apt to forget, do not necessarily imply that the country out of which they were dug is either beautiful in appearance, pleasant in climate, or rich in soil. Accordingly, when Peru is first canght a glimpse of, the chances are that the visitor has many illusions suddenly dissipated. The first aspect of the country which any one approaching it from cither the north or sonth gets, is a long range of "sandy or rocky shores, with scareely a sign of vegetation, reminding the traveller of the countries bordering on the Red Sea, and yet every now and then, when streams descend from the snow-covered mountains, there are valleys of surprising fertility (p. 300), whose produce can only te limited ly the amount of labour proenrable, and the extent of irrigation. Still, as no rain falls on the coast, even the most verdant spots have a dusty and dry look. Wherever there is no irrigation, all is arid, rocky, or sandy, and most of the mountains bordering the plains have a stony, uncul ivable appearance. As you penetrate up the valleys into the mountains, everything ap,ears barren, except the few green fields near the streams, wherc irrigating canals spread fortility. And yet one se?s signs that in former times the sides of the monntains were cultivated, as many appear to be covered with gigantic steןs, the former well-watered terrace-gardens of the Indians. Passing the first great range of mountains called the Cordillera, there are extensive barren steppes, three broad, well-inhabited, and fertile valleys, and then again over the Andes to the fine slopes leading to the Amazon and its tributaries, where the real tropical vegetation is seen in all its luxuriance." In this favoured region the Peruvian Govermment has made an attempt to found a colony, principally of Europeans, and at Chanchamago the experiment seems likely to succeed. Coffee plantations are being laid out on an extensive seale, while in the valleys sugar estates and food products claim the attention of the colonists. The distance from market is, however, so great, that until some cheaper mode of transport than the backs of mules can be discovered, the future of the settlement can never be otherwise than doubtful.

## The Popllation of Penc.

A walk through Lima, or any large Peruvian town, must impress the traveller with the belief that the population of the country is as varied as its physical features, Bhack men and brown jostle eath other, and in some localities the yellow almond-eyed Mongol seems as mamerous as the :ather swarthy Catuensian. The negroes are descendants of the slaves who were imported from Afrien; the Indians are, of course, the matives of the country, and greatly outnumber every other mationality; the whites the descendants of the Conguistadores, and those who followed them; while the Chinese have been imported of hate years direet from the Flowery Land, in order to suplly the necessary labour on the sugar estates, on the Guano Islands, and elsewhere. Statisties are very vague and imperfect in Peru, but a census, taken in 1sifi, gives the whole population of the country at $2,670,075, *$ of whom $1,35:, 151$ are males, and $1,3,20,92,1$. females, the unusual preponderance of males being due to the fact that the Chinse bring few of their women with them. The number of the Indians can be oaly guessed at, but it is known that the whites bear to the other races but an insiguitiemut proportion. Even this official census does not correctly give the popmation, for in Pern, as in other conntries where enlightenment is not predominant, the numbering of the people is reeeived with that profemed suspicion which the experience of many ingenious attempts at taxation is apt to engender. Henee, when the census day arives, some of the less patriotic, but more cautious citizens, absent themselves from their homes.

## Indestries and Trade.

Peru is divided into one "constitutional" (or feleral) and two littoral provinces, and eighteen departments, the latter again each sub-divided iuto several provinces; and though there are shades of difference, and some valleys are noted for one kind of eultivation mor" than another, the produce of the comotry is throughout of a tropieal chatacter. In the department of liura cotton is extensively cultivated ; near Trujilli, ia Libertad, exchincal is suceessful; whiic in the departments of Ieal and Mooquegra the vine is the chief phant reared. In all the coast valleys, the prople are ocenpied with the enltivation of the sugar eane, but in the loftier situations of the interic: wheat is grown with suceess, and on the eastern slopes of the mountains the coffee bush flourishes. In the western departments water and the want of agricultural labourers are what most retarl the farmer ; in the east, water is plentiful, hut the toilers are equally few. $\Lambda$ great proportion of the population is employed in the silver mines, for whieh the country is so celebrated, and in quarrying out the nitrate and guano deposits. The males, as we have seen, mostly predominate in the districts where the Chinese are chiefly employed as field hame, as in Lima, Lihortad, Lambayeque, Ica, and in Tarapaea and Callao, where guano, nitrate of soda, and commeres induce labourers to congregate. But the Pernvian population is chiefly agrieultural, only a relatively small proportion of the inhabitants being employed in mines, or in the guano and nitrate business. "And," writes Mr. St. John, "the impression remains on an observer that most of the exportable prodnce is the work of comparatively few

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hands, the bulk of the population being engaged in rough agriculture, which does not enable the courtry to feed itself," A feew years ago a mania for sugar eultivation took possession of Pern. The proprictors " went into" the business too frequently without caleulating the cost and profit very narrowly. Machinery often ealenlated for two or three times the cane which can at present be cultivated was crected on the estates, though it. reality the

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market for the production is seemingly so limitless, that it is thought in time most other eultivations will give way to it. Worst of all, there is not labour enough to work the estates; the supply of Chinese coolies which was at one time believed to be on the point of flowing into the country has been stopped, and for the last year no labourers have come from the Flowery Land. In 1821 a law was passed that all negroes henceforward born in the republic should be free, and soon after Chinese were imported, so as to fill the slaves' places, and prevent them from striking for higher wages when they should be free. The contraets made with these coolies were for eight years, at four dollars a month, but the labourers.
when not entrapped by the agents and contractors, were too often the mere scum of Chinese ports, criminals, and cither unable or unwilling to work, and were crowded into such miserable vessels, that frequently numbers died on the middle passage from China to lerrı. The farmers who wished "labour" had to pay down in eash for each workman about 400 dollars, or $£ 75$, for passage money and preliminary oxpenses. Henceforward they treated the unfortunate Celestials as their slaves, and the law giving them the power of flogging them, and keeping them in irons, the 1 nonlt was, in the greater number of eases, the worst usage for the new arrivals, who yer, thstanding the remonstranees of the Chinese Goverument, can obtain no redress for the cuelty of the planters, or the exactions of the police. Nor are the Government free from the charge of injnstiee. The contract wages were to be four dollars a month, but now the Chinese are paid in paper, which is worth from 1 s . Sd. to 2 s . 6 d . per sole, or dollar, the average value of which is $4 \mathrm{~s} . \mathrm{l}_{\mathrm{P}}$ to 1878 , about 43,000 Chinese had been introduced into the country, and but few had returned home. The export of sugar has greatly increased of late years, and may at present be estimated at about 85,000 tons, valued at $£ 1,360,000$, the greater part of which is sent to Great Britain and Chili, only abcut 12,000 tons being consumed within Peru itself, so that the iotal product may be set down at about 100,000 tons. The other important products of Peru are cotton, wool, and silver, the wool being at present chiefly exported from Mollendo, a rising town, chosen as the site for the sea terminus of the railway from Puno. Here also hides, Peruvian bark, copper ore, barilla, crude tartar, lead ores, tin, \&e., are shipped, and of late years a considerable quantity of coca leaves ( $p$. 188) have been included among the exports. A small amount of gold is sent out of Peru, but no estimate lus been made of the quantity. Guano is another great product, as well as Peruvian bark, but both of these characteristic riches of the country we are now deseribing will be more fully referred to at a later stage of our examination of the Land of the Incas. Callao is the chief port of Peru, being the entrepot for the city of Lima, four miles inland. Of eourse, the bulk of the shipping is also British, and of late years the number of not altogether reputable individuals brought to the shores of the South Paeifie by these vessels is on the increase. The ships, though sailing under the English flag, are in many cases manned to a great extent by Italians, Greeks, Austrians, and that mongrel crew known as Leviutines, few of whom ever return from Peru, and if they do not obtain their wages and discharge by getting up some charge against their superior officers, which a British seaman would not bring forth, or by malingering, "they, as a last means of being left lehind, desent, and many become petty shopkecpers, the whole of the petty shopkeeping leing in the hands of Italians and Austrians, from the western shores of the Adriatic. The coist swarms with these seamen as fishermen, boatmen, and erews of small sailing craft, trading on the coasts of the republies of South America, most of whom have deserted from British ships, or obtained their discharge by wrong doing." Such at least is Mr. Vice-Consul Wilson's opinion.

## Mines.

The silver mines of Peru are principally situated in the Cerro Pasco, and produce on an average about $1,400,000$ ounces per annum. This amount, it is hoped, will by-and-by
be increased. In addition, a good deal of metal is obtained from other mines, and, as we have already noted in our necount of Bolivia, a large amount also passes through Arica from Bolivia.* The silver mines of Peru were famous even in the days of the Incas, and it is said that even to this day the Indians know of veins which they will not inform the whites of, and only take a littlo ore from them when compelled by necessity. Von Tschudi $\dagger$ tells us that on one occasion he lent an Indian of his acquaiutance a erowbar. The man brought it back, after a time, with the distinct traces of silver ore upon it. On being impeached with being engaged in mining, he scarcely attempted to deny it, but, true to his race, determined to keep the secret to himself, knowing the terriblo misery whieh his countrymen endured when they had to work in the silver mines of the old Perivians. $\ddagger$ From the time of the Incas up to the present day, the Indians lave been in the labit of burying their money and silver vessels, so that the riches forgotten in the soil must be great. The mines of Cerro Pasco were aceidentally discovered by an Iudian, named Huari Capeha, in 1620: and in 1667, Don Jose de Scaleedo begun to work several rich mines in the Province of Puno. Crowds of adventurers floeked to these new sources of wealth, but they quarrelled over their soils, and a pitched battle was fought on the plain of Laycaycota.\$ Puno has an altitude greater than any considerable town in Peru, except Cerro Pasco, being 12,550 feet above the sea. Its eathedral is the largest building, at that elevation, in the world, and there are few anywhere better built or more massive. The town is comparatively modern, for the rich silver mines in the momntains of Cancharani and Laycaycota, at the feet of which it is built, were not begun to be developed until a little over 200 years ago. The secret of these mines was, it is said, communicated ly a love-sick Indian girl to Jose de Scalcedo, who worked them with immense profit, until his wealth excited the cupidity of the unscrupulons Count of Lemnos, the Viecroy of the country at that date. Thongh his richness were, perhaps, his only crimo in the Vieeroy's eyes, accusations sufficient to bring him to Lima, and eventually to seeure his execution, were not wanting. In vain the unhappy silver miner offered a thousand mares of silver a day to the judges if they would suspend execution of his sentence until he had time to appeal to the crown of Spain. But the triumph of the creatures of Del Lemnos was short, for when Salcelo's faithful Indians heard of his fate they stopped the drains of the mine, which soon after filled with wator, and a small lake now occupies the spot, which tradition assigns to the loeality, of the once rich vein, or "Veta de la Candelaria." The story of Salcedo and his silver mine is yet talked of in Puno as the principal event in its history. In 1663, thes' mines yiched $1,500,000$ dollars' worth of silver in one year. $\|$ 'Ihough the petition to the King of Spain was not in time to save Saleedo's life, yet it appears to have leal to

[^107]nome justice being done to his son, for he was afterwards created Marquis do Villa Rica de Puno, and took a leading part in subsequent mining operations, though he eventually died mad of disappointment at not being able to reach his father's source of wealth. Other mines, however, wero opened out, and one vein-the Manto-was earried moro than two mites into the mountain. From 1775 to 180.t the mines near Puno yielded ores worth $1, i 56,000$ mares of silver, at seven to nine dollars the mare, the riehest year being 1802, when the yield was 52,000 mares, but since 1810 it has been steadily decreasing, and in 1894, the year after the expedition of the Spaniards, it had sunk very low.* The total want of combination among the Peruvians, owing to the suspicion with which "moneyed men" in that country regard each other, prevents the formation of joint-stock companies to work these still undoubtedly mexhansted mines. Accordingly, in place of the numerons mines which once covered the hills of Cancharani and Layenyeota, the only operations at present carried on consist in. extracting the silver from the coarsely smelted ores rejected by the miners of former days. Wool, nowadays, is one of the staples of Puno, and silver hardly ranks as a greater sonree of wealth than the butter which is exported from the port of Arequipa as the produee of the mumerons flocks and herds which pasture on the soil, which the early exploiers only zalnel for the possibie ore which it might conceal. The town itself is a dreary place, ": with low-thatched houses, of alout 10,000 inhabitants, $\dagger$ through which glide noiscless llamas, and equally silent Indians, in garlss as sombre as that of the bare hills that circle romal the town, and ent off the view in every direction except towards the Lake ['litienea, pp. 173, 177, 181, 185]. Here are the bright waters of the Bay of Puno, bordered all romod by a broal belting tortora, and relieved by a fer rocky islets, each of which has its Indian tradition, and in one of which the royalist governors conlined their patriot eaptives during the war of the revolution, withont shelter from the sun or protection from the coll." $\ddagger$ The town of Cerro Paseo, Dr. Arehibald Smith deseribed forty years aro as mather a poor phace, and as these mphad Pernvian village-towns have a common family trick of standing still, the deseription may apply with equal exactitude at the present day. $\$$ It is situated 13,500 feet alove the sea-level, in a hollow in the mometains, with the tine lake of Chinehayeocha on its somth, and surrounded on all sides with magnifient seenery, among which pasture great heriss of eattle and Hocks of sheep. Groups of tame llamas and shy vieunas can be here and there seen, while the whole landseape is described as variegated with lakes, rivolets, and marshes, "whose surfaces are ever rippled by the fluttering flocks of geese, ducks, snipes, plovers, water-hens, herons, yanavicas, flamingoes, \&e., which, at the proper and appropriate scasons, animate and adorn this wide expanse." Far off to the west, and skirting the limits of the great plains, can be observed, from the surrounding heights, strange fragments of stone that look at a distance like dark pine-trees rising under the shade of the adjacent momatains. The population of the town is in a great degree migratory, and increases and diminishes according as the mines are highly productive, or in a state

[^108]Illa Rica rentually Other han tivo es worth 02, when in 180.1, ptal want men" in to work numerous pperations smelted staples of which is nod herds me which of abont ndians, in the view ]. Ilere gr tortora, e of which n, without Paseo, Dr. se upland ption may above the its south, reat howh bere and inlets, and ks, snipes, ind approd skirting ts, strange e shade of migratory, in a state

of poverty and inundation from want of proper drainage-the bete noire of these and other Peruvian mines situated at a great elevation. The number of iuluabitunts cren in the winter was, perhaps, never much under 4,000 or 5,000 , but at the time our author wrote they had been known to swell up to twice that amount, the most active part of whom, of course, foumd accommolation under ground. "When the mines were thus productive," writes Dr. Stuith, "the abode of the master-miner ramg with the clink of hard dollars, as the die was kapt in constant motion; and the fair sex crowded from the more genial vales, and enlivened the miner's home with the song, guitar, and dance." The elimate for half the year is exceedingly gloomy, and variable and changeable. In the course of a fer hours the wind will veer round the whole $p^{\text {mints }}$ of the compass, and from sunshine the weather will change to rain, sleet, snow, hail and rain again. The lanes, during the winter months, are simply miry ditches, while the average climate may be guessed from the fact that the temperature rarely rises above $4^{\circ}$ in the shade, and as seldon falls below freezing. During the dry season-that is, l'om May to Novemberthe sun at noon shines forth with great foree from a clendless sky, but at night the frosts are intense, and the mornings piereingly cold. In August, the air is so remarkally dry that the nose and faee becomo parched and puinful; in some people, indeed, to such an extent, that they are foreed during that month to seek a more temperate elimate a few leagues away At Cerro Pasco, and still more at most mines situated at a still greater height, the oppressiveness caased by the great rarefaction of the air is also felt. This we have already noticed, but a German mining captain-Herr Emile Hïnicken-has described the effect upon the Indian labourers in the Mexicana mine, in San Pedro de Espina, that though this loeality is situated within the Argontine boundary, we may take his data as equally applicable to all mining distriets situate like that of Puno and Cerro Paseo, at a great height. The Mexicana mine is situated between 13,000 and 15,000 feet alove the sea-level, and is worked by miners who live in badly-lighted little huts, alove the clouds, and whose lives of privation and misery are complicated hy dangers withont number. "Around and above him all verdure has disappeared. He ean only perceive three colours: at his feet, the ciouds resemble a whitish-grey mist, a hazy ocem, from whence emerge the peaks of the mountains; bcfore him, the white plains of the eternal snow, and above him an invariably blue sky of a deep blue colour. The only animalssave the dog-which have follow d man to these stormy regions, are a bird and a small rat both of a greyish colour. In the shade the thermometer always remains below zero in these habitations, which are probably, the most elevated on the earth, because they surpass, by more than a thousand feet, the gold regions of Tibet and the Himulaya. Water is procured by melting ice over fircs which are kept up night and day, and the comestibles are preserved for several years. Meat can only be eut by means of the axe or the saw. It loses its taste in this continually frozen state, and I myself have been able to verify that an almost petrified piece of beef found in a mine abandonel for a year previous, and which I had cansed to be cooked-it could not be wasted-had completely lost its taste. Although the extremely rarefied air regularly causes headaches and cticer indispositions to novices, the lungs soon become accustomed to it, and it produees a greater activity. The movements of the body at this height. however cautions they may be, oceasion
rese and its cren rauthor ive part ere thus cliuk of from the dance." ible. in comprass, in. The pate may male, and vemberthe frosts zally dry to such climate : ill greater It. This cken-has Pedro de may tike rro Pasen, feet alove tts, above $s$ willont perecive ean, from he eternal auimalsd a small velow zero ause they Himalaya. r, and the the axe or been able or a year comple tudy and other sa greater e, oceasion
a palpitation of the pulse, and a very great agitation of the respiratory organs. It is dolorons to hear the sighs and groans of the apines, or porters, who come from the depths of the mines to discharge their sacks filled with from fifty to eighty kilograms [about lis lbs. avoirtupois] of ure. This labour appears to be beyond the power of luman chergy, and yet I know some miners who have thus labourei, eight or ten months per "Inum, for thirty or forty years." To return to Cerro Pasco, further to the morth, but at considerably lower elevation in the Andes. The rigour of the climate of this town is mitigated ly the fact that about live miles from it is situated a coal mine, while at Puno the llamas' excrement-mixed with rushes and long grass-is the only fucl, umless when "champa," a turf (not peat) cut from the surface of the marsh laml, in the frigid districts of the Sierra, can be got. Chareoal is expensive, and accordingly cannot be used for smelting purposes, though in the houses of the richer miners it is oceasionally burnt. Fodder is searce: barley is grown, lont is always eut when green, though potatoes and "aleaser" are the principal vegetable products -and a league lower down, at the village of Cajamarguilla, wheat is grown, and numereus little gardens of onions, cabbages, lettuces, and flowers are eultivated for sale to the miners and elergy of Paseo, which, throughout the year, is supplied with a variety of fruits, and plenty of fresh meat and other provisions from the warm or temperate valleys below, and the lakes and plains around the mines. The prodigal aystem of working the mines has led to many of them loeing utterly ruined by the melhecked eagerness of the owners trying to get the greatest amoint of ore, regardless whether this could be obtained with safety to the mine. Henes, owing to the pillars of ore which ought to have been allowed to stand being quarried away, "eaves" have been frecuent and most disastrous in every respect to the labourers' lives and the proprietors' pockets. In most mines a labourer is paid either in money or in ore. If the mine be a good one-or, in his language, "boya," or "bolla" -then his daily pay or "mantada" of ore might be worth a great deal, or, on the contrary, if it is a poor one, worth little or nothing. In the latter cases the labourer usually insists on being paid a regular wage in money. If, however, the mine be rich, he prefers the gambling excitement of the "mantada." As the cupachero, or porter, laden with his load of ore in the capa-lio, or leathern bag, comes gasping to the surface, his wife usually awaits him with a pot of chichu, or maize spirit, which he eagerly grasps. Here the "mantada" of ore is assigned to him according to well-known rules, and carried home by his spouse, not unfrequently only to be squandered in dissipation, or on the pagematry of ehurch festivals and processions. At the mouth of the Great Mine, ealled the "King's Mine" (La Mina del Rey), which rendered the family of Yjura so fimous and wealthy, Dr. Smith mentions that a labourer has been known to refuse eighty dollars for his "mantada," which abounded in pieces of polverilla and massisa-an ore rich in native, and nearly pure silver, but necessarily rare. It does not follow that this rich ore is in the end the most profitable to the mine-owner, for its very richness tempts the labourers to steal it to such an extent that the poorer quality often pays better, beeanse it does not tempt the cupidity of the miner, who eannot conceal enongh to make theft worth rumning any risk for (Vol. II., p. 68). The "mantadas" are usually purchased by the "bolicheros," or proprietors of small hand-mills, in which they
grind small quantities of rich ores, by a primitive apparatus eonsisting of a kind of roeking-stone placed on the concave surface of a larger stone well accommodated beneath, and moved by a man who, with the help, of a long pole, baliances himself on the upprer stone, which, by the weight and motion of his own body, he keeps roeking incessantly. The bolicheros are, in many cases, mere "fences" for the purchase of stolen ore. The


A fam-hocse in noctiens feht.
whole town of Cerro Paseo is honeycombed with miniug exeavations, often supported by pillars of rich ore, which are frequently filched from manown to the householders, who live in unsuspicious security over them, until either a slight earthquake shock, or the weight of the superincumbent mass, breaks down the roof, and produces great disaster to life and property. The silver miner's life is one of continual embarrassment. Sometimes, in spite of the plunderers and rogues who prey upon him, he makes great gains with little outlay; but again, all is often outlay with no profit whatever. He is usually in the hands of the "habilitador," or capitalist, who lends money to aid the struggling, mine-owner, taking repayment in plata-piña, or silver not entirely purified from the
kind of beneath, e upper essantly. e. 'Ilue
supported scholders, :e shock, ces great rassment. kes great He is truggling from the
mereury which adheres to it in the process of umalgamation. Added to this, the miner is usually a reckless gambler, who rately thinks of the morrow, aul formerty, owing

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to the vicions system of the last habilitador having the first claim to be paid, he not only involved himself further and further in difficulties, but also, by this absurd law, was enabled to postpone the payment of the creditors, who had, undoubtedly; the first claim on him, when feasts and frolies, cards and dice, left him anything wherewith
to meet lis linbilities. The profits of working silver mines, lowever, greatly depenil upen the price of quicksilver, which, with salt, is so essentinl in the operations of amulgamatiug the silver from the ernshed ore. The great quicksilver mines of Humeavelien at whe time yielled so extensively, that in seven yents 600,000 lbs. of mereury were oldaned from them. But theso are now practieally abandoned, and the guicksilver used in 1 ern is obtained from New Almaden, and other rich deposits in Califormian Ip to $15 i ̆ s$, a mine could be held for an indefinite period without being worked. Aecordingly, out of 15,000 mines in Pern, not more than 600 had any miners in them. During the hast ten years, over $36,000,000$ dollars' worth of silver has passal through the Lima Mint to be coined or assayed. In thirty years-from 1790 to $1520-101,781,176$ ounces of silver were smelted at the seven Government works, notwithstanding the difficulties in the way of tramsport and fuel, and the primitive methods employed. Mr. Gibbs, the present United States Minister to Pern, mentions that between the years $16: 30$ and 1515, $175,000,000$ dollars' worth of silver were producel from the Cerro Paseo mines alone.

Gold is not extensively distributed in Pern, thongh it is reported to be abumdant in the remote provinee of Carabaya, beyond Lake 'litieaen, when washed out of the beds of strems by the: Indians (p. 997), but no roads lead to them, and the country is destitute of labour. From some such loenlity the ohl Incas must have obtained abmandace of golla, for the furniture of their palaces were phated with it, and most of their ordinary vessels were composed either of tho precions metal or of silver. It is affirmel that in luhles and eaves of the carth, known by tradition to only a few Indians, have been concealol since the time of the Ineas immense stores of wealth, which the Indians yet cherish the hope of using when the timo comes. When the rebellion of Pumacagua broke out in 181t, it is said that the rebel chiefs drew upon these treasures. "An aged chief arrived at the house when Pumaeagua was sitting in council, and conducted him blindfold up the beed of the Huatanay. After a walk of some hours, the bandage was suddenly removed, and he found himself in a cave, strewn with golden figures of every size and shape. Maving taken as much as he could earry, he was conducted in the same mamer to his own house, where he arrived, to the astonishment of the comeil, dripping with wet, and laden with the sinews of war." Mr. Markham, to whom I am indebted for this eurions tale, had it from an old lady of the Astete family, whose father was a colleagne of Pumacagua, and saw him return with his precious freight. When the rebels were entirely defeated on the plain of Ayavirine, on the road from Cuzeo to Puno, Pumacagua offered with his last breath to produce a pile of gold larger than that collected by Atahalpa as a ransom for his life. The secret of the hidden cave has never been divulged. Searehing for treasures forms almost a trade in Peru-Mr. Squier declares the chief ono of the country-and no doubt there is mueh yet to be diseovered. For instance, at Chimus were found, not long ago, in one of the rinins, a eloset filled with vessels and utensils of gold and silver, principally the latter, pilel regularly one layer above another, and apparently hidden away here at the time of the struggle between the Chimus and the Ineas. The vessels were mostly in the form of drinking eups or vases, "some plain, others ornamented, of very thin silver, and oxidized to the extent of making some of them so brittle as hardly to bear landling." Some of the skulls found here wero
end "1ки! gamutiun al ut she olstained used in I'p to cordingly, rring the mat Mint ollures of cultices in tiblos, the and $1 \leqslant 19$
int in the
of stremms stitute of of emole, l'y vessele : in loules concerilod herish the $t$ in 1811 , red at the b the beal oved, and

IIaving his own and laden rious tale, amacagra, afeated on h liis last ansom for hing for c of the $t$ Chimus d utensils ther, and imus and me plain, ing some lere wero
elther gilt, if' encireled by bands of gold, ormamented with slender feather-shaped orme ments of the same metnl. 'The Compuistalores' deseription of the 'Temple of the Sun at Cuzeo, even ullowiug a little for their grandilopuent languge mul tendeney to esngergration, leaves no doubt that it was not only a stately ediliee, but one ubounding in riches. The cornices of the walls, inside and out, were of grold, or plated with grold, as were the immer walls. A great phate of grold at the castern end representent the sul!, and manged benenth were the desiceated-or as some say the embalmed-hodies of the Juen Bmperors, in roynl robes, und seated in arolden chairs. The numerous subsiliury structues in this luilding dediented to the Moon, Yenus, the Pleiales, thunder and lightuing, and the rainbow, as well as for the supreme lontill aud the temple attendants, were all rielaly decorated witi gold and silver. The story that the terace of the temple garden was covered with clods of goll, and supported an infinite virricty of troes imitated, in gold tuld silver, with figures of men, animals, birls, reptiles, mal inseets, ull in the same metal, .Ir. Siquier thinks must be received ns a fable. The Jucas werr, julging from what we know of them, n remarkably sensible and practical people, and it is samecty credible that they would thus recklessly lavish gold on imitations of firewoud piled away in the temple-for this is ulso one of the Comquistadores' tales-or in such very useless oljecets as those described. No, doult, however, Garcilasso de la Vega, himself of the Inca line, was right in saying that the walls of the temple were lined with phates of golls. In several public and private musenms of Cu\%o there exist sereral of these phates, which are simple shects of puro gold, benten as thin as fine note-pajer. The Jucas chuin, sumk in some lake near Cazeo, is said to have required sili men to carry: hut this the author does not expect the reader to believe mbess he chooses.
'lin and eopper ores of high yuality are found in Southern Peru, between the Cordilleria and Andes ranges, in the form of little nodules in the drift, and are obtained by washing, but, are entirely shipped to Eugland for reduction.

Another source of wealth, which of late years has come into note, is the great deposits of nitrate of soda or saltpetre which exists in the sonthern departments, and is shipped from Iquique and other small ports. Its uses are many, but it is chiefly as a fertiliser that it is in demand. In the lampa of Tamarngal and in the Tarapaca province these deposits of nitrate of soda and borate of lime are so great, as to be practicably inexhaustible for lumdreds of years. It was calculated, in 1861, that the nitrate of sodit grounds cover an area, in the districts mentioned, of lifty square lengues, and that allowing 100 lbs . weight of nitrate for each square yard, there would be (:3, 000,000 tons lying ready for nse, so that at the rate of shipment, Mr. Bollaert calculated the deposits would not be exhansted for 1,393 years. The same estimate-minus $3,000,000$ tons-will apply still. But as no regular surveys have been made, this ligure must be looked upon as little better than a careful guess. The nitre is a Government monopuly, and is elicfly exported to Great Britain. The object of the (iovernment making the export of nitrate a monopoly was avowedly by decreasing the sale to raise the price. Both oljeets have been attained, for the export has been reducel from $3: 6,569$ tons, the maximum amount which left the country (in 1875), to 213,940 tons, as in 1877, and the priec increased from $£ 11$ a ton to $£ 16$. But whether, after paying interest on the capital expended, and the expenses ineident to working.
and export, much profit lemaius, or a profit equal to a fatr duty, Mr. St. John, in common with many others, doubt. Should it again fall below $\&$ la, the moneroly may prove a loss to the State. $\Lambda$ s it is, this State interference, with an interest, whieh gave employment to 330,000 tons of shipping, and to many thoasands of people who were thrown ont of employment, or injured peemialy, was a step so grave as to deserve the unpopularity which attended it in all grarte:s save the few interested ones. In 1875-as an instance of how a monopoly may benelit a few, but injure many-the town of Iquique had between 15,000 and 20,000 inhabitants. In 1876 the census gave only 11,717, and in 1877 it was estimated that there were not more than 7,000 or 8,000 in this once flourishing town, though it onght to be added that in 1875 Iquique suffered from a


fearful fire, and in 1877 from that gront earthquake wave which swept in upon the Peruvian coast, doing an enormous amonnt of damage. To force proprietors of nitrate grounds, who have not made over their property to Government, to do so, a duty of 11s. per 100 lbs.-simply a prohibitary tax-has been enforced on the export of the substance, and, in addition, the Govermment have lixed a near date, after which wo proposals of transfer will be entertained. The shipment of borax is prohibited by the Goverument.

## Glavo.

Guano* is, however, the great source of Pernvian riches, or rather, the one which is most easily got at, and with the least expenditure of umproductive capital. It is merely the exerement of innmmerable sea-birds throughout mumbibed ages, the exceeding dryness of the coast climate having allowed it to remain on the spot where it was: dropped. Mised with this material are also the rerps of the birds, often converted into

[^109]common a loss to - ment to a ont of opularity instance ique hal 717, and this mene
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upon the of nitrate a duty of rt of the which no ted loy the
ammoniacal salts (large lumps of which are found among the guano), their bodies, and the remnauts of seals. The guano is still in course of deposition, but the seals have been so much hunted that they now rarely venture to desert the beach, but frequent the caves, shores, and low rocks washed by the waves. Formerly, they came a considerable way inlind, and, indeed, travelled to the centre of the islands, and, as is proved by the deposits of their skins and bones, even at their highest points. At the Lobos


DIGGING OET OUANO IN THE CHINCHA ISLANDS, PERU,
and Maeabis Island, Mr. Squier notes that the birds are still inereasing the deposit very rapidly. Several species of sea-birds frequent the Guano Islands, but the one which chiefly contributes to the guano deposits is the "peynero," which, though smaller than a goose, will leave from four to six ounces of excrement per diem, and in the space of ten weeks, whieh is the length of the breeding season, will return, for the hospitality afforded to it, from eighteen to twenty pounds' weight of this unsavoury source of Peruvian wealth. There are also deposits of guano at Bahia de Ferrol, but it is formed almost exelusively by seals, and is so full of the bones and skins of these animals as not to pay exportation. Long before the Spaniards lauded on this coast, to destroy a nobler 119
civilisation than their own, the use of this odoriferous manure was known to the Ineas. Gareilasso de la Vega tells us that the birds were protected during the breeding season with such care that it was not lawful to land on the islands on pain of death, lest the birds should be frightened or driven from the coast. "Neither was it lawful to kill them at any time, either on the islands or elsewhere, also on pain of death. Each island was, by order of the Incas, set apart for the use of a particular province, and the guano was fairly divided, each village receiving a due portion. Now, in these times, it is wasted after a different fashion."* This, however, did not long continue, for no sooner did the South American Republics attain their independence than they began to devote part of their attention to the deposits of manure on the desolate islets off the coast of Peru. In 1801 Humboldt had brought specimens of it to Europe, but it was not for nearly forty years afterwards that it became an article of commerce. This trade attained great proportions after 185̃2, when a dispute between Peru and the United States, regarding the possession of the Lobos (or seal) Islands, was settled through the mediation of Great Britain and France in favour of the latter country. Hitherto, the shipments of guano had been entirely free; but henceforward guano became, as it had been in the days of the Inca empire, a State monopoly, and a source of revenue, unauthorised exports being prohibited under heavy penalties. In $1876,150,804$ tons, valued at $£ 1,900,008$, were sent to Great Britain, its value as a top-dressing being equal to nitrate of soda. The supply of guano is not, however, likely to soon decrease, as the mnst careful search has only resulted in finding additional deposits in the West Indies (Somicro, \&e.), on the coast of Africa (at Ichaloe), in the Arabian Kooria Mooria Islands, and on the shores of Chili, Bolivia, Patagonia, and Australia. The Iehaboe deposits were exhausted as early as 1845 , while the guavos from most of the other localities are much inferior to the Peruvian article, having lost one or more of their most valuable constituents. On varions other places-for example, on Ascension Island-there are small deposits, but nothing such as would render them of commereial importance. The guano has now become an important source of. cevenue to the country. For instance, in 1850, fully three-fourths of the State expenses were defrayed, as Mr. Markham puts it, "by shovelling lheaps of dirt off a desolate island on the const." It is also one of the chief "securities" which they give for their too frequent-and too unremitting and disinterested, as the unhappy bondholders know to their cost-loans, though the immense sums so easily obtained bave been recklessly and extravagantly squandered by the incapable or knavish rulers with whom Peru, like most South American countries, have for long been cursed. The peoples' heads got turned by the discovery that in these islands was a source of wealth undreamt of, and instead of reserving the revenue derived from it to pay their home and foreign delts, or to construct publie works, the receipts were, as in General Echenique's time, either embezzled or "spent on immense and unnecessary armaments, and in jobbing salaries and pensions. Thousauds of families"-Mr. Markhari, an admirer, be it remembered, of the South American people, was thus writing with honest indignation in 1802-" now live on the public money, and when the guano receipts fail, the ruin and suffering will be severe, and widely spread. On the strength of the guano monopoly, almost all the taxes have been abolished, the tribute of the Indians amongst them, and

[^110]he Ineas. g season lest the kill them and was, uano was is wasted $r$ did the part of Peru. In rrly forty ed great rding the of Great uano had the Inca prohibited to Great guano is sulted in Ichaboc), ronia, and trom must r more of Ascension ommercial country. Markham also one ıremitting immense capable or long been s a source pay their n General rmaments, admirer, dignation ruin and monopoly, hem, and
the revenue is composed mainly of three items-guano, custorns, and stamps. The foreign debt is $24,205,400$ dollars, and the internal delt and compensation for slaves amount to a still larger sum. But the great drag upon the public treasury is the enormous army of 15,000 men for a population under $2,000,000$, with upwards of 2,000 officers, those who are unattached being still on full pay. This will give some idea of the number of families who are living in luxury and idleness, on the public money, and of the distress that will follow the sudden stoppage of their incomes, which is inevitalle when the guano comes to an end." In Pern there is no direct taxation, guano being the philosopher's stone that enables the people to get along without such disagreeable alteruatives as those with which we of these income-taxed countries are only too familiar. Guano begets loans also, the last two loans being "secured" chiefly on the guano deposits. But even guano will not do everything for Peru : the receipts having lately fallen, and accordingly the immense public works, which were at last commenced, including a railway to the summit of the Audes, and the construction of an iron-clad fleet, one unit of which Admiral de Horsey, in May, 1877, gave such a sorry account of, besides the (non) payment of the interest on a large debt, have reduced Peru to the condition of having an annual deficit. A great many people in England are, therefore, uaturally interested in guano, because, as the gnano disappears, so do their chances of ever seeing the money which they lent on this vanishing security. Yet no country has less excuse for not paying it delte than the potentially rich, but actually poverty-stricken Republic. According to the estamates which have been made, the whole amount of guano in the southern deposits is not at present more than $1,800,000$ tons, thus distributed:-

|  |  |  |  |  |  |  |  | Tous |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Huanillas | ... | ... | ... | $\ldots$ | ... | ... | ... | 1,000,000 |
| Point Lobos ... | ... | ... | ... | ... | ... | ... | ... | 200,000 |
| Pabellon de Pica | ... | ... | ... | ... | ... | ... | ... | 350,000 |
| Chipuna Bay ... | ... | ... | ... | ... | ... | ... | ... | 250,000 |
|  |  |  |  |  |  |  |  | 1,800,0 |

But, aside from the tendeney to exaggerate, it is difficult from the irregular formation of the ground to arrive at any accurate estimates of the amount of guano existing ir the localities mentioned. The Point Lobos deposits are to be closed for a time, but at Pabellon de Pica there is considered to be enough to last for three years to come. In Huanillas it is believed that there is more guano than in any of the other deposits, while the amount at Chipana Bay, which has not yet been opencd up by the Government, is given in the data already quoted. These estimates afford but poor comfori to the bondholders, who advanced $£ 30,000,000$ on the faith of guano. "Some other ? posits has been announcel," writes our Minister to Peru, in his report for 1878, "but as these aunouncements occur at stated periods without any further results, but little notice is taken of them. It appears, however, highly probable that other deposits may yct be diseovered, the probabilities being more for than against $i$. There is an evident falling-off in the export of guano, partly arising from the difficulties of loading, partly from decreased demand, from the heavy stocks held in Europe, and from the agriculturists finding th. quality so unequal. That the guano in the southern deposits is much mixed with stones and sand, there appears
to be no doubt, and although a portion of this extraneous matter may be petrified guano, which, when crushed, is valuable, still it is certain that there is little left of that fine guano for which the Chincha Islands were celebrated." On the Island of Lobos there are estimated to be still 600,000 tons of inferior guano, but all shipments there have for the present ceased. "The Government," Mr. St. John mentions, "has lately put up to auction 50,000 tons of a substance found in the guano deposits, called culeche, which some suppose to be petrified guano. They have received one bid of $£ 319 \mathrm{~s} .1 \mathrm{~d}$. $n$ ton, but its value, as a fertiliser, has yet to be proved." * At one time, all the guano sent to this conutry was obtained from the three Chincha Islands in the Bay of Piseo, situated about twelve miles from the mainland, so that it may be convenient to describe the method of shipment as practised in that locality so familiarly associated with what is, if not the staple of Peru, yet one of its most familiar exports. The islands are usually steep, and hollowed into caverns, which, in time, fall in, and so ruinously reduce the islets in size. Indeed, the three seem to have been formerly one large island, and i:a times yet more remote, Mr. Markham is of opinion that probably they were camected with the coast, as is shown by a chain of rocks, the Ballista Isles, and finally the island of San Gallan, which suecessively intervene between the Chinchas and the Hill of Lechuza, on the south of Pisco. The guano is over sixty feet in thickness, and is, or was, shovelled out by convicts. It was then loaded by aid of a small steam-engine, which worked a huge coal-scnttle-like iron trough, which dug into the guano, filled itself, and discharged the contents into a car. This, when filled, was drawn along a tramway to the edge of the cliff, where it was emptied ( p . 305). The guano was then shovelled down a common shoot into the hold of the vessel which was loading. "Strong-brained negroes trim it in the hold at a stated price per hundred weight, but so penetrating and pungent is the ammoniacal scented dust of the guano, that they have to wear iron masks. The labourers engaged in the operation live in a few filthy cane huts, and the officials in iron honses." There is no watcr, of course, on the island, and though composed of manure sent all over the world to stimulate vegetation, no crops of any description. In the less frequented parts of the island, at the time of Mr. Markham's visit, thousands of sea-birds still laid their eggs in little caverns exeavated in the guano. Some of the hills were covered with their nests. The "legitimate guano bird" is a species of tern; but there are also large flocks of divers, pelicans, and various species of gulls always visiting the islands, and contributing, as no doubt they have always done, to the fertilising deposits which give them the sole importance in human eyes. The Chinese are also largely employed on the Guano Islands, but owing to their bad treatment, home sickness, and disgusting employment, they frequently commit suicide. The islands are, of course, nominally under the Peruvian authority, but, in reality, the foreigners, who come hither for cargoes, make a law unto themselves, and this is not unfre quently a very peeuliarly ill-regulated law. $\dagger$ When Inmboldt visited the Chinchas,

[^111]1 guano, hat fine here are for the auction suppose value, as atry was ve miles shipment staple of hollowed Indeed, remote, t, as is Gallan, on the shovelled worked self, and mway to shovelled g-brained netrating wear iton and the composed scription. thonsands le of the of tern; Is always to the Chinese reatment, le islands oreigners, ot unfre Chinchas,

## , Commerce

Chincha"
he found the rock covered, in some places, to a height of 200 feet with guano, in horizontal strata, varying in thickness from three inehes to a foot, and of different colours. In

a bridge over the uribamba, eastern perv
some spots, however, it will be found of a uniform black colour upwards of 100 feet in depth, so that if his statement is correet, that "during 300 years the coast-birds have deposited guano only a few lines in thickness," the age of some of the lower strata must be extremely great.

## CHAPTER XIX.

## Peru : Its People, History, and Prospects.

Tira people who inhabited Peru prior to the arrival of the Spaniards having none but the vaguest method of perpetuating the events of history, we are dependent for what we know of the chronicles of the country, up to the arrival of Pizarro, on the monuments which the Incas and their predecessors erected, and to their traditions collected by the Conquistadores and their descendants. The history of Peru may be divided into four stages : that preceding the arrival of the Incas, the Incarial period, the reign of the Spanish Viceroys, and the period succeeding 1820, when the country attained its independence and became a Republic. This form of Government it still retains.

## Pre-Incarial Times.

When the highly-civilised Inca race arrived in the country, it is believed by some antiquaries that they found the low-lying coast lands in possession of a råce almost as cultured as themselves, and in some cases even more so. How long this race had been there, and where they came from, are questions which no man has ever yet been able to solve. But that the people who built the dwellings of Tia-Huanuco, with its sculptured monolithic doorways, whose ruins yet astonish beholders, as they amazed the Incas who first saw them, and modelled their own dwellings on them, were civilised after a primitive fashion, admits of no doubt. These ruins stand at an elevation of 12,930 feet above the sea, and one of the mysteries is how an ancient civilisation could have centred round a spot which is now a frigid desert, and where the mere rarefaction of the air makes breathing difficult to those whose life has been passed in the low lands. Scarcely anything is known regarding the nature of this pre-Incarial civilisation, traces of which stretch from the Audes to near the sca, for at Pachacamac, twenty miles from Lima, there are the remains of a great eity, and of the chicf temple of this ancient people. Their religion seems to have been a pure theism, for when the Incas of Cuzeo carried their arms across the Cordillera, they were astonished to find in this great temple-with doors of gold, inlaid with precious stones, and rivalling that of the sun at the Inca capital-no visible representation of any deity. The inhabitants called the being whom they revered Pachacamac, the Creator of the world, but the Incas were too politic to destroy the building, but contented themselves by erecting alongside of it a temple, and a house of the Virgins of the Sun, to the worship of which they gradually won the inhabitants.* The ruins of this city of the dead cover wholly or in part four considerable hills, and owing to the drifting of the sand over a sonsiderable portion of the buildings, the site now presents a most forbidding aspect. "Profuse were the oblations and sacrifices of the Indians in this temple. Of the precious.

[^112]metals the Spaniards took away, among their spoils, twenty-seven eargas of gold [1,657, lbs.], and 2,000 mares [ 10,000 ounces] of silver, without having diseovered the place where wero hidden 400 cargos of these two metals, which is presumed to be somewhere in the desert between Lima and Lurin. Señor Penelo affirms that Quintera, the pilot of Pizarro, asked for the nails and tacks which had supported the plates of silver, bearing the sacred name on the walls of the temple, as his share of the spoil, which Pizarro granted as a triffing thing, but which amounted to more than 4,000 mares [ 32,000 onnces]. We may judge from this what was the wealth of the temple in its greatness." When Hernandez Pizarro sent to plunder it, he obtained 90,000 pesos in gold, though the priests had, according to Miguel Estete, who wrote an account of the expedition, quoted by Oviedo, taken away 400 loads. Over this spot, which was onee "the Mecea of a great empire," a few poor Indians vegetate in miserable cane and rush houses, contemplating the numberless graves and huge ruins of the mighty capital of their forefathers. To this holy place pilgrims seem to have resorted from every part of the country, anxions to sleep their last sleep in the sacred soil. Pachacamac is a place of death, not only, as Mr. Squier remarks, "in its silence and sterility, but as the burial-place of thousands of the ancient dead. Dig almost anywhere in the dry, nitrous sand, and you will come upon what are loosely called mummies, but which are the desiecated bodies of the ancient dead. Dig deeper, and you will probably find a second stratum of relies of poor humanity; and deeper still, a third, showing how great was the concourse of people, and how eager the desire to find a resting-place in consecrated ground." If any conjecture can be hazarded regarding the age of the people who built these ruins, which bear to the Inca structures much the same relation as those of Palanque and Axmul (p. 68) do to the work of the more modern Aztees, it is that they are the handiwork of the same race as those who erected on Easter Island those platforms of masonry and gigantic statues regarding the origin of which the natives themselves are ignorant.

## The Incas.

We know almost as little of the Incas. From tolerably well-sifted traditions it is, however, considered by the majority of historians probable that, twenty-five years before Norman William landed in England, Manco Ccapac, the first Inca, set foot in Peru, and began to build the city of Cuzco, on the shores of Lake Titicaca. He was accompanied by his wife, Mama Oello Huaco, and both represented themselves to be the children of the sum, sent by their father to instruet the Peruvians in his glorious worship, and in arts whice they wot not of. They were commanded to march until a golden wedge or wand, as it is sometimes called, which they earried with them, should sink into the ground, and when they arrived at the spot where Cuzco now stands the wedge sunk, and the city was begun. Manco the Rulu-for sn lis name signifiestaught the simple people the arts of agriculture and architecture, and instructed them in a purer religion than they hitherto possessed, while his wife plied the distaff, and from her the women learned to sew, spin, and weave. Who this fabled-for we fear much of his history is fable-law-giver was, has been the subject of endless conjecture.

Some will have it that he was a son of Kublai Khan: others as positively assert that he came from Armenia. Wilder theorists claim him for the Egyptians, Mexicans, and even for our own country. About the same time, and most probably from the influence excreised by strangers who had left some civilised country, three South American communities took a start in civilisation far above the other South American tribes, and their traditions about that event bear a strong resemblance to each other. In Mexico, Quetzalcoatl

(Vol. II., pp. 238, 253) appears to teach the Toltecs the arts and sciences; in the mountainous country around Bogota, Bochica, also a sun child, appeared to teach the Muyscas to build and sow, to calculate time, and compute celestial events by means of astronomical laws ; lastly appeaied in Peru Manco Ccapac and his wife. There seem good grounds for belicving that all these law-givers came from China and other parts of Eastern Asia, and though it may be doubtful whether they had only been 400 years on the American continent, when, unhappily for them, the Conquistadores found out their homes, there can be little ground for thinking that their civilisation came not from without but from within.* It is, however, possible that the Incas

[^113]hat he d even crecised es took ditions zalcoatl or them, hat their he Iueas
came from Central America, and that Manco was by no means the first of them. Mr. Squier, indeed, scouts the whole tale, and considers that Peruvian civilisation slowly sprung up and spread among the rude savages of Peru, though, as they advanced in culture, they cleared away the more primitive structures of their barbarous days to make room for those of which we see the broken remuants. Be this as it may, Manco Ccapae was the founder of a great empire-equal in size to Adrian's, and larger than Charlemagne's-and in Mr. Markham's eloquent words, "the progenitor of an illustrious line of potentates, unconquered warriors, the patrons of architecture and poetry. Among them we have luca

viEw of THE CITY OF CtZCO, pelit,

Rocea, the founder of schools, whose cyelopean palace still remains, a monument of bygone greatness; Vizacocha, the Inca with florid complexion and flaxen locks, whose massive citadel still frowns from the Sacsahuaman Hill; Pachaeutec, the Solomon of the New World, whose sayings are recorded by the pious care of Gareilasso; Yupanqui, who performed a, march across the Chilian Andes, which throws the achievements of Hannibal, Napoleon, and Macdonald in the shade; Huayna Ccapac, the most chivalrous and powerful of the Incas, whose dominions extended from the equator to the southern confines of Chili, from the Pacific to the banks of the Paraguay ; and, lastly, the brave young Manco, wortly natiesake of his great ancestor, who held out in a long and unequal struggle against the Spanish invaders, and whose talent and valour astonished even the soldiers of Gonzalvo de Cordova. But he was defeated: the sun of Peruvian fortune, which for a few years had lingered on the horizon, sunk in a sea of blood, and the ill-fated

Indians fell under the grinding yoke of the pitiless Goths." Some of the features of this Inca civilisation I have tried to explain in another work ("The Races of Mankind"), and the volumes which Gareilasso de la Vega, Robertson, Prescott, Markham, Squier, Bollaert, and others have written on the subject must be referred to for a complete account of this strange civilisation which flourished in Cuzeo, a eity whose gorgeous temples and palaces surpassed in splendour anything which had hitherto been seen; "where trophies of vietories won on battle-fields from the equator to the temperate plains of Chili, were eollected: where songs of triumph resounded in praise of Ynti, the sacred deity of Peru-of Quilla, his silvery spouse-of the beneficent deeds of the Incas."

From Cuzeo (p. 313) roads branched off in every direction, often running for miles through galleries cut in the solid rock. Rivers were crossed by swinging bridges of oziers, suspended high in mid air. Precipices were ascended by stairenses, and valleys were filled with solid masonry. Such a road for 1,500 to 2,000 miles-about twenty feet broad, and paved with heavy flags of freestone-ran from Quito, through Cuzco, into Chili. Posts, marking the distances, were plaeed at proper intervals, and also houses where travellers could lodge over night. So thoroughly were the posts organised, that it is said that the Inca Huayna Ccapac ate fresh fish at Cuzeo which lad been eaught the day previously at Lurin, on the Pacific coast, a distance of over 300 miles, in one of the most mountainous countries in the world. It is said that the Inca empire, at its period of greatest development, contained upwards of $30,000,000$ inhabitants. This we think Mr. Squier is right in pronomeneing a gross exaggeration. Only a small portion of the country is capable of cultivation, and therefore of supporting inhabitants, and, indeed, it was only by the greatest care, skill, and foresight on the part of the Incas, that the comatry was able to provide food for the people on its soil. Only China, perhaps Japan, and some portions of India, afford in modern times a parallel to the extreme utilisation of the soil which was effected in Perru at the time of the Inca cmpire. The Peruvian coast is, indeed, so forbidding that one wonders, after seeing it, what attractions it could have for its earliest explorers. For more than 2,000 miles it is a treeless, lifeless, waste of barren rock and sand, traversed only here and there by little green ribbons of trees, in spots where there is a little water, or where the contour of the soil is such as to afford the struggling cocoanuts, and such-like vegetation, some protection from the scorching rays of the sun falling on an arid soil never moistened by a drop of water. Altogether, I am inclined to believe that if the population included in the Inca empire were put at between $10,000,000$ and $12,000,000$, or about double what the three States wholly, or in part, comprised in it-Ecuador, Peru, and Bolivia-contain in modern times, the estimate would be a liberal one. Las Casas, "the good, but not very accurate, Bishop of Chiapa," tells us that "in the province of Peru alone the Spaniards killed above forty millions of people." The Conquistadores were a ruthless set of ruffians, and, after the manner of swashbucklers generally, did not under-estimate their feats in the Cadiz and Madrid taverns; but this is perhaps a little too much to give even a tempered crdence to. The last Inea who can ever be said to have reigned, with undisputed sway, over an undividcà empire, was Huyana Ccapac. He had two sons, Huasear and Atahualpa, between whom he divided his empire. Atahualpa, the "Aucca," or traitor, as he is still with abhorrence styled by the Indians, invaded
of this kind "), Bollacrt, $t$ of this 1 palaces phies of ili, were Peru-of ning for bridges valleys enty feet to Chili. travellers said that reviously untainous elopment, nouncing tion, and ne, skill, d for the afford in in Pern ing that explorers. nd sand, here is a gr coconn falling ieve that ,000,000, or, Peru, as Casas, ovince of istadores , did not a little said to pac. He tahualpa, invaded
the territories of his brother, drove him from the throne, and by a series of buteleries, attempted to exterminate the royal race.

## The Spaniards.

But the end was approaehing. Comets, signs, and wonders had been seen in the heavens, and strange men with unknown power were reported to have landed on the coast. That heroie swineherd, Franciseo Pizarro, arrived with a handful of men, and, taking advantage of the distracted condition of the country, rapidly earried all beforo him, slew Atahualpa, and by his superior arms and knowledge soon overran the empire, and became master, in spite of the heroic defence made by the Indians. It is needless to repeat the familiar tale, which has been so well told by so many modern historians-how the Ineas' descendants fled to the forest, there for a time to maintain their independence, thence to bo seduced by false promises only to be eruelly slaughtered; how Cuzeo, the royal eity, was ruthlessly phundered, and the noble works of the Incas either destroyed or allowed to fall into decay-how gold, gold, gold, was the only ambition of the conquerorsan appetite which was never satiated; and yet the gold was no sooner got than it was gambled away or spent in debauchery. These, and a hundred similar tales, are fully narrated in the works I have so often referred to. Murder and rapiue were the daily oceupation of the brutal Conquistadores. But even the Indians failed to afford sufficient material for this, for no sooner was the country partially subdued that the eonquerors turned like wild beasts one on another. Pizarro exceuted his old eompanion in arms, Almagro, and in his turn was assassinated by Almagro's son. Within a year young Almagro was beheaded, and in another twelve months Gonzalo Pizarro, another of the terrible brothers, murdered Nuñez de Vela, the Viceroy, and stuek the hairs of his beard as trophies in the hats of himself and companions. Gonzalo was himself put to death by Pedro de la Gasea, who came to quiet the new country, and so the pandemonimm went on. Meantime, the Ineas were sinking lower and lower. They tried rebellion, but were defeated. Then the laughters married the Conquistadores, and from these unions are sprung some of the noblest families of Spain and Peru, just as in similar circumstances the daughters of the Saxon nobles and the Norman earls and barons resulted in perpetuating lines which would otherwise have become extinct. By-and-by, the few surviving members of the Inca family were foreed to live in Lima, where they were soon killed by the unaccustomed elimate, or were lost among the population, until, at the present day, this imperial race only survives in the person of a few male descendants, who reside in the vieinity of Cuzeo-still ar essential Indian town less known than Paris to the fashionable people of Lima-proul of the memory of their forefathers, but it is needless to add, without eherishing the most remote idea of re-establishing their fallen glories.

Lima, under the Viceroy, became the eapital of one of the riehest and most famous of all the Spanish colonies "in the Indies." The "City of the Kings"-Ciudad de los Reyes, as it was at first called-founded on the 6th of January, 1535 (o.s.), by Pizarro, is the most interesting, historically, of all the capitals reared by the Spaniards, and was, for 300 years, the seat of tho "haughtiest, and perhaps the most luxurious and
profligate of the Vieeregal Courts." Its Viecroys were invested with royal power, and ruled in the height of Peruvian glory, not only what now constitutes Peru, but also the vast provinees of Chili, La Plata, New Grenada, Bolivia, and Ecuador, though the two latter had not obtained that name at the time they were under the Spanish crown. Here also flourished the Church, and the abominable Inquisition. Hence, Lima was at onee, as it is partially yet, one of the most bigoted and immoral towns on the face of the earth. No eity had such converts and churches, or were endowed with such a prodigality of wealth. In Lima was the college of San Mareos, the oldest university in Ameriea, founded fifty-six years before the English landed in Virginia, and sisty-nine before the exiles in the Mayflower set foot on Plymouth Rock. "Here," writes Mr. Squier, "Pizarro was assassimated by the men of Chili, the avengers of the stout and generous Almagro: and here his bones repose. Here was born and here died Lat Patrona de todas las Americas, the patroness of all the Amerieans, the only American woman who ever attained the honour of canonisation. From the turrets of the fortress of San Felipe, in Callao, the port of Lima, the flag of Castile and Leon floated for the last time, on the Continent of America, as the emblem of Spanish sovere gnty. But, apart from these clustering bistorieal recollections, we know that here centred the products of the mines of Putosi and of Paseo, and the marvellous wealth of Castro-Veireina and Puno. Here, too, in 1681, the Viceroy La Palata rote through the streets of his capital on a lorse whose mane was strung with pearls, and whose shocs were of gold, over a pavement of solid ingots of silver. Here, too, eentred the galleons of the East laden with silks and spices from the Philippines and Cathay, and on the verge of the horizon, off the land, hoverel the sea-hawks, Rogers, Anson, Hawkins, and Drake, swift to suateh from the treasure-ships of Manilla the rich booty, which even the Virgin Queen did not disdain to share with the freebooters of the South Sea and the Spanish Main. Now Californian ruicksilver is carried past the open shafts of the cimabar mines of Huancavelica: the argentiferous "vetas" of Salcedo are abandoned; the sands of Carabaya are no longer washed for gold; and the infant State of Nevada supplies more silver every year than ever did Pasco and Potosi, and all the mines of Peru put together. The Indians can no louger be parcelled out to the favourites of power, and the negro no longer pays the tribute of unwilling labour to the rich proprietors of Lima. But the ancient 'City of the Kings' is still rich, still gay, and still flourishing, and more luxurious than in her proudest colonial days. If the sourees of her ancient wealth have driel up, fortune has opened new and richer fountains, and the rough, rocky, and repulsive guano islands, which line the arid Peruvian coast, the terrors of the ancient mariners, and still the haunts of howling seals and screaning sea-birds, pour into her lap a more than Danaëan shower of gold; alas! with all its concomitants of social, eivil, and political demoralisation." This graphic description gives in so brief a space such a perfect picture of the aspects of Lima past and present, that $I$ can find no words better to express what is wished to be conveyed to the reader. Lima and the Limenos I have, in another work, described in sufficient detail, and need not again enter upon the task. At present the city contains-according to Paz-Soldan-l04,932 inhabitants, and the department in which it is situated 207,085, while Cuzeo, the old capital of the Incas, with the surrounding country, is put down in the last census as having 237,083 people. he vast latter re also nee, as of the digality merica, ore the Pizarro magro : mericus, ned the lao, the inent of istorical f Pasco, Viceroy ng with

Here, ines and Rogers, illa tho oters of past tho Salcedo nt State all the Ivourites oprietors urishing, t wealth epulsive ers, and re than political picture ss what or work, ent the n which ounding

But one fatal day calue an end of the rule of His Catholic Majesty. On the 28th of July, 1821, the independence of the country was proclaimed, long after the other Spanish republies had been established. Even then it was not by their own strong arms that the Peruvians gained freedom, but by the aid of San Martin and the Chilians (p. 279). For twenty-five years the conntry was distracted by revolutions and civil war, and up to date it has not been free from those "pronunciamentos" which are the curse of the Castilian race in the New World. Perı -the truth is-has not been the most successful of the new nationalities which sprung from the loins of old Spain. Let us, however, hope that better things are still in store for the Republic which rose on the ruins of the luxurions province of Peru, as it was reared oii the wreek of the still greater and nobler empire of the Incas. The proud, yet kindly and polite people, are worthy of a better fate than being at the beck of political adventurers, who have yct to learn the rudiments of political science, and of knaves whose dishonesty was born with them. It would be an ungrateful task, and in a work of this nature an unnecessary one, to go over even in the slightest detail the history of these civil broils which continue up to the present time. To those who wish well to the Spaniards in South America, and their descendants, these are saddening, and all but hopeless. The "Vandals who landed with Pizarro destroyed a happy Government. It may yet be the fate of their descendants to replace it by something better and more worthy of the race from which they sprang, than the distracted oligarchy which, under the name of a Republie, has for so long made the name of Peru an unwelcome one on the Bourses of the world.

## Revente.

We are especially interested in Peru, for the greater part of its commerse is with us, and nearly all of this cenires in the Port of Callao. In 1877 Peru sent $\mathfrak{\& i}, 606,502$ worth of goods to Great Britain, and in turn imported $£ 1,421,031$. Railways are being developed, 1,563 miles being open or in process of completion at the end of 1878 , theugh at present the State railways in so sparsely a populated country are not, and were not expected to be, remunerative. Indeed, with the exception of the eight miles' line from Callao to Lima, atul from Lima to Chirales (nine miles), none of the private ones are understood to be successful commercial specnlations. The Peruvians' income and expenditure, though a painful subjeet with a great many people who have lent money to them, and get no interest on it, are not very well known, for the finances of the country, not being a subject for pride to anybudy, are, in the slipshod kind of government which for long has possessed it, not published vith much regularity or accuraey. Large annual deficits seem to be the rule, but the revenue and expenditure may be set down, in ronnd figures, at respectively $£ 6,000,000$ and $£ 7,000,000$. The public debt it the country is large-much too large. The foreign liabilities are about $£ 43,00 C, 000$, but the bonds have long been at a discount, while the sum owing in the country, exclusive of a floating debt of an unknown amount, is usually set down in the statistics at $£ 2,500,000$.

## Climate.

Yet Peru ought still to be a great country. It has abundance of resourees, and a climate suitalle for nearly all constitutions. Exeessive dryness is its chief characteristic,
of July, epublies gained ears the ee from Peru rom the Spublic reek of people, ave yct on with ry one, inue up ca, and landed endants sprang, g made
especially on the coast, where for many years consecutively not a drop of rain will fall, though the want of showers is compensated to some extent by heavy night dews. The coast slimate is also moderated by the cool winds, and even in the valleys the heat is not oppressive. In Lima the lighest summer temperature is $85^{\circ}$, and the lowest winter $61^{\circ}$ Fahrenheit. February is the sultriest month. Yet, though under the tropies, Lima is not a tropical city in the strict sense of the term. From June to November it is often positively cold, the snowy peaks of the Cordillera being so near at hand, and also no doubt from the fact that the cold Antarctic current, with a temperature thirteen degrees less than the open sen, a hundred miles from the land, runs along on the const. Lima in "winter" is not a pleasant place, owing mainly to the fog and damp, which so penctrate the air as to make everything-cven the sheets of beds-chill and sticky, and the footpaths slippery and pasty. "The walls drip, the hand slips in endeavouring to turn the clammy door knobs, and feathery and almost ethercal fungus sprouts up in a single night from the depth of our inkstand, or replaees the varnish on our boots with a green and yellow mildew. Bone-aches and neuralgias walk the streets, and outrage their occupants unchallenged, and the noise of the church bells is stifled in the damp and lifeless atmosphere. We are assured that 'it never rains in Lima,' but the dense permeating mist not unfrequently forms itself into minute drops, when it is called guara. These soak through the flat thatched roof, discolouring the ceilings, trickling upon the floors, and rendering an umbrella necessary for the pedestrian in the streets." Yet Lima is a charming city for all of that. In the Sierra, or mountainous districts between the Cordillera and the Andes, or Eastern Cordillera, a region of magnificent scenery (p. 301), the climate varies according to the elevation and various local peculiarities, but unless at great elevations is very pleasant, and fitted for a European. The Montaña, or vast impenetrable forests which stretel for hundrecis of leagues eastward from the Andes to the confines of Brazil, is an unproductive region, unvisited by the white man, and not even inhabited, save ly a few wandering tribes of Indians (pp. 309, 317). Among the most untamable of these are the Chunchos, whose head-quarters are near the sourees of the Parus. They have always repulsed civilisation, and have been one of the chief curses of the settlers, who had cleared a few farms, within sixty miles of Cuzeo. In 1853 there were a few of these farms still existing, but in 1861 the settlers seem either to have abandoned the region, in fear of the Chunclos, or been massacred by them; and the luxuriant forest again covers spots where, not twenty years ago, crops of coco, cocoa, sugar, and other tropical crops were raised. The Montana is certainly the most tropieally beautiful portion of Peru, and the one which in other circumstances is likely to yield the richest return to the cultivator. The great forest trees supply fine woods and endless gums and resins. Lovely birds flutter through the foliage, preying upon the fruits which grow wild, or the insects which flit among the flowns (0. 312), while the Indians gather indiarubber, gum-copal, indigo, balsam of copaiba, vanilla, cinnamon, ipecacuanha, sarsaparilla, vegetable wax, and other produets, which grow spontaneously in the woods, or are prociuced by the forest trees. In the plantations still existing on the edge of the mountain are found in culture small crops of tobacco, chocolate, cotton, coffee, and sugar, and ether tropical products. Coca cultivation is indeed destined in no distant period to be an important one in Peru and Bolivia, even
though the Council of Bishops, which met in Lima in 1569, pronounced the Indian stimulant a useless and pernicious leaf, and on account of the belief entertained by the Indians that the habit of chewing coca gave them strength, "an illusion of the devil," though a great many people agree with the devil (pp. 187, 188). The great vegetable product, however, of the Montaña, is the Jesuits' or Peruvian bark, from which the wellknown alkaloid quinine, so extensively used to check fevers, is derived. This bark was first employed in Europe in the middle of the seventeenth century, and derives its name from the Countess de la Chinehon, wife of a Peruvian viceroy, who first brought it to Europe. It is derived from various speeies of Cinchona, or, as Mr. Markham will have it, Chinchona, which grows in the Colombian, Eeuadorian, Bolivian, and Peruvian forests. This bark used to be collected by the Cuscarillos Indians chiefly, who endure great hardships, but whose method of obtaining it was to cut down the tree which produced it. This, of course, soon thinned the more valuable trees, and such was the reckless stupidity of the Peruvian Government, that, though it put every obstacle in the way of the tree being planted elsewhere, they never attempted by a system of forestry to renew the riches thus improvidently wasted. The result was that quinine was getting seareer and scareer, and dearer and dearer every year, and threatened soon to be unobtainable. In these circumstances, the Iudian Government determined to try and naturalise the tree in India. To obtain seeds and young plants was the difficult task assigued to Mr. Clements R. Markham, C.B., F.R.S., late of the India Office. This duty Mr. Markham, with his assistants—Dr. Spruce, Mr. Cross, and M‘Ivor-performed most suecessfully, and a flourishing plantation-already yielding mueh quinine-on the Neilgherry Hills, will ever remain a monument of noble work well done. In Java and the mountainous region in Jamaiea the tree has also got naturalised, so that we very soon shall be quite independent of the Peruvian forests for this valuable bark.* Another source of riches of the Montaña is also disappearing, owing to the reekless manner in which "the groose that laid the golden eggs" is being destroyed. We refer to the beautiful skins of the ehinchilla (C. lanigera, p. 304).

We now leave the Land of the Sun and the New World for islands still sunnier, and a world still newer.

[^114]vegetable the wellwas first me from it it to have it, forests. re great produced reckless way of to renew g scarcer btainable. alise the to Mr . rarkham, filly, and will ever egion in lependent Montaña ce golden lanigera,

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[^0]:    * Bailey: "Central America;" De Waldcek: " Voyage Pittoresque et Archéologique dans le Province d'Yucatan (Amerique Central);" Stephens: "Central America;" Squier: "Nicaragua;" "The Statos of Central America;" Scherzer: "Travels in the Free States of Central America;" Wagner and Scherzer: "Dio Republik Costa Rica, \&c.;" Wells: "Honduras;" Frötel: "Central America, \&c.;" Morelet: "Travels in Central America;" Bidwell: "The Isthmus of Panama," and the various works and papers referred to under special heads in the ensuing pages.
    $\dagger$ Squier: "Honduras," p. 3. No one can study Central America without aeknowledging his endless obligations to this greatest authority on that region. I accordingly do so oneo for all. I may add that I visited the Isthmus of Panama in 1863, and crossed the continent through Nicaragua in 1866. The notes taken in these hurried pecps at Central America I have incorporated in tho descriptions which follow.

[^1]:    * Commercial Reports received at the Foreign Offiee from her Majesty's Consuls, 1863.

[^2]:    * Not having access to the Report itself, I have compiled the account which follows from various artieles in American and English journals, and more particularly from the leller of a New York correspondent of the Standard.

[^3]:    * A full survey of all the projects may be found in a supplement by Professor Nourse, of tho National Observatory at Washington, added to the Senate documents published in 1875, by Commanders Lull, Crossman, and others, documents illustrated with twenty large maps. The supplement is valuable as giving fun lists of authoritics on the subject.

[^4]:    " Pim: "The Gate of the Pacific," \&c.
    $\dagger$ Depuydt: Journal of the Royal Geographical Society, Vol. XXXVIII. (1868), p. 60.

[^5]:    * Brine: Journal of the Royal Geographical Saciely, Vol. XLII ${ }_{4}$ p. 357.

[^6]:    * Hence it is also sometimes called vegetable marrow, or midshipman's butter. It is a specics of the Laurel order (Lauracea), and the tree, of which it is the fruit, grows, as a rule, to the height of twenty or thirty feet.

[^7]:    * Brine: "The Ruined Cities of Central America." Journal of the Royal Geographical Society, Vol. XlII., p. 355, Bernuilli ; Petermann's "Gcographieal Mittheilungen," 1868-69, and 1873: "Reports of Embassy and Legation," 1871 and 1875 ; "Consular Reports," 1873; and the works of Del, Waldeck, and Stephens already referred to.

[^8]:    "Quoted by Squier : "Honduras, Descriptive, Historical, and Statistical" (1870), p. 135.

[^9]:    * Statistical abstracts from the screral colonial and other possessions of the United Kingdom in each year from 1861 to 1875 (Parliamentary Roports, 1877).

[^10]:    * "Parliamentary Reports of Embassy and Legation," 1869, 1871, and 1873. Laferrière: "De Paris a Guatemala" (1877) ; Marr : "Reise nach Central Amerika" (1863), \&c.

[^11]:    * Annual statement of the trade of the United Kingdom in the year 1876 (" Parliamentary Report"). Pelletier: "Honduras et ses ports" (1869; Reichardt: "Centro-America" (1851), and the works of Squier, Fröbel, Seherzer, Marr, and others.
    $\dagger$ Belt: "The Naturalist in Niearagua;" Seeman and Pim: "Dottings by the Way;" Scherzer: "Niearagua;" Squier: "Nicaragua : its People, Seenery, Monuments, \&e ;" Bülow : "Der Freistaat Nicaragua in Mittelamerika;" Keller : "Le Canal de Nicaragua;" "Reports of Embassy and Legation," 1869 ; "Consular Reports," 1876 and 1877.

[^12]:    - Collinson: Proeecdings of the Royal Geographical Society, Vol. XII., p. 37.

[^13]:    * Sec " Races of Mankind," Vol. I., p. 267.

[^14]:    * Collinson: Lib. cit., p. 32.
    + This was, I believe, the same gentleman, who, under the name of Genexal MeGregor, made, in 1819, an ill-fated attempt to free New Grenada from the Spanish yoke. He eaptured Portobelo, but the place being afterwards re-captured by the Spanish forees from Panama, the prisoners-mostly British-were eompelled to work on the public roads. Ten of the officers were shot, and when, in 1820, the order to froe the captives arrived, only 40 half-dead men out of 417 elaimed the boon, and of these several died befere they eould reach Chagres (Res'repo's "Historia de Colombia"). A portrait of tho gallant "Cazique" forms the frontispieco to Stranguway's "Mosquito Shore" (1822).

[^15]:    "Thomas Gage: "A New Survey of the West Indies, \{ce." (1648).

[^16]:    *Bell, lib. cit., p. 268 ; Squier: "Waikna, or Adventures on the Mosquito Shoro" (1856) ; Strangeways: "Sketch of the Mosquito Shore, including the Territory of Poyais" (1822) ; Bard: "Adventures on the Mosquito Shore" (1875), \&c.
    $\dagger$ "Races of Mankind," Vol. I., pp. 250-259.

[^17]:    * In 1875 the Foreign Learis Committee of the House of Commons reperted that "exeept the sum retained in England out of the proeecds, the bendholders never reeeived anything whatever in respeet of the prineipal or interest of the debt."

[^18]:    * Belly: "A travers l'Amérique centrale" (1872) ; Boyle: "Ride aeross a Continent" (1868) ; Peralti: "La Républiquo do Costa Riea" (Le Globe, 1871); Peralta: "Costa Rica" (1873); Frantzins: "Der siidlöstlicho Theil der Rep. Costa Rica" (Petermann's "Geographical Mittheilungen," 1.G69), (ke., as well as the works, papers, and maps of Fröbel Marr, Scherzer, Wugner, Molina, Gabb, Polakawksy, and Keith Johnston, the Consular Reports, and tho official publication, "Informo presentadopor el Secretario de estado en los despachos de hacienda y commercio al Congreso constitucional" (San José, 1877).

[^19]:    * Columbus, as is well known, sent his brother Bartholomew to open negotiations with Henry VII., in caso he should bo disappointed in Spain as he had been in Portugal. On the voyago to England he fell into the hands of pirates, who stripped him of everything, and held him prisoner for several years. When he finally escaped and reached London, he was so destituto that until he could gain a littlo money by the drawing of maps for sale, he was unable to appear at court in fitting style. But by this time it was too late.
    + Helps: "The Conquerors of the New World and their Bondsmen."

[^20]:    *"Vnyages," Vol. I., p. 179.

[^21]:    "Powles: "Now Grenada: Its Internal Resources" (1863) ; Bidwell: "The Isthmus of Panama" (186;); Otis: "Handbook to the Panama Railroad" (1860); Zeltner: "La Ville et lo Port de Panama" (1868); Haussaurek:
    "Four Years Among Spanish Americans" (1867) ; the various Consular Reports, as well as those of Embassy and Legation; "Geographical Magazine" (with map of the isthmus), April, 1878, \&c.

[^22]:    * Edwards: "History of the West Indies," Vol. V., p. 210 (Appendix) ; Hendersen: "Honduras," p. 178; Wright: "Memoirs," \&e., p. 28.

[^23]:    * Squicr: "Honduras," p. 177.

[^24]:    * Morolet: "Travels in Central America," po. 195-n'94.

[^25]:    * Sapindus saponaria, and probibly also $S$. incqualis. These berries are also used as a substituto for soap, the outer covering containing the principle known as sapomine in sufficient abundance to produce a lather with water. $\dagger$ Aristolochia Gwaco.

[^26]:    *" Races ot Mankind," Vol, L., p. 318.

[^27]:    *" Yovage dans 1' Yucatan," p. 42; also Squier: "The States of Central America," Chap. XXV.

[^28]:    * In Panama, the term Nina, or young lady, is applied alike to married and unmarried ladies, just as Señorita is in Peru. Señora is applied to more elderly ladies.

[^29]:    * Morelet : lib. cit., p. 118 et seq.

[^30]:    * Articlo "America," "Encyclopædia Britannica," 9th edition.

[^31]:    * The origin of the name Andes is probably lost, thongh various have been the conjectures on the subject. For instanee, it has been attributed to the Peruvian word Anta, or taper; Ante, copper or metal ; Antis, the name of a tribe resident in tho mountains; and to the Spanish Andenes, the term applicd to the terraced gardens on the western slopes of the mountains in Chili. In Nortbern India, curiously enough, the Himalayas are known to somo of tho tribes as the Andes.
    $\dagger$ Pissis: "Comptes Rendus," Vols. XL. (1855) and LII. (1861): "Amates des Mines," 5th Scries, Vol. IX. (1850) ; Forbes: "Quarterly Journal of the Geological Soeiety," Vol. XVII; Rammelsberg: "Monatsbericht Akad." Wiss., Bcrlin, 1870; Orton: "The Andes and tho Amazon" (1870); Rickard: "A Mining Journey Acress tho Andes" (1863); Article "Andes," in "Eneyclopædia Britannica," \&c.

[^32]:    ${ }^{*}$ Sometimes given at 320,750 square miles.

[^33]:    *Restrepo: "IIistoria de la revolucion de Colombia" (1827); Berg: "Physiognomio der tropikal Vegetation Süd Amerikns" (18.56); Mosquera: "Compendio do geografia dos statos unidos do Colomhia" (1866); Hall: "Culombia: its l'resent Condition, \&e.," ( 1811 ); and the works already quoted; in addition to Colazzi: "Atlas do los estados nuidos do Colombia," and "Colombia: Siundo unn relacion, geografica, topografica, agricultural, commercial, politica, \&e., de aquel pays" (2 vols., London, 18:2).

[^34]:    * Behm and Wagner: "Dev̈̈lkerung der Erde," 1874, p. $\mathbf{7 0}$.
    $\dagger$ Jourmal de la Soc. de Statist. de Paris, January, 1876, quoted in Almanach de Gotha, 1878.

[^35]:    - Reiss: Zeitschrift der Deutschen Geoloq. Gessecl, 1873. Stübel: Bull. de la Snc. Geog. de Paris, 1874; quoted by Webster.
    $\dagger$ " Naturwissensch. Reisen im tropikal Amerika," p. ${ }^{514 .}$

[^36]:    - Aecording to Reiss and Stübel ; but Humboldt gives the height as 21,420 feet.

[^37]:    * Villavictacio: "Gcografia do la Republica del Ecuador" (18.58); Spruce: Journal of the Linncar Society, 1860; Jamieson: Jourual of the Royal Geographical Society, 1861 ; De Thoron: "Amerique equatoriale," 1865; Orton: "Tho Andes and the Amazon" (1870) ; Simson: "Notes of Journeys in tho Interior of Sonth Americe" ("Proceedings of the Royal Geographical Society," 18in); Flemming: "Wanderungen in Ecuador" (1877); Gerstieker: "Achtzehn Monate in Süd-Amerika" (1863), \&e.

[^38]:    * In somo looks, otherwise nuthoritative, most crroncous estimates nare given of the population of these islands. For instance, in that which I have already quoted, and shall havo again oceasion to do, Virgin Gorda is said to have 10,000 inhabitants, Tortola 11,000 , and so on, the truth being that the whole of the British Virgin Islands hawl in $\mathbf{1 8 7 1}$-three years after the date of the book-only 6,651 people.

[^39]:    * Engravings of these curious dwellings are given in "The Races of Mankind," Vol. I., pp. 276, 277.
    + Tejera: "Marpa fisieo y politico de los Estados Unidos de Venezuela" (1876): "Venezucla pinctores esca e lustrada" (1875); Codazzi : "Rapport sur les Travaux Geographiques dans la Venezuela" (1841); Dance. "Four Years in Venezuela" (1876); Meulemans: "La republique de Venezuela" (1872) ; Thirion: "Les étatsunis de Venezuela" (1867); Eastwick: "Venezuela" (1868); Spence: "Land of Bolivar" (1878); "Consular Reports," \&c.

[^40]:    * "Life in the Llanos of Venczuela" (1801).
    † Eastwiek: "Yenezuela, or Sketches of Life in a South American Republic," pp. 242-240.

[^41]:    * "Paradise Lost," Book NI., v. 406.
    $\dagger$ See also Plassard: "Bulletin de la Societé de Géogrnphie, Paris," 1808, p. 568.
    $\ddagger$ "Illustrated Travels," Part IX., p. 262.

[^42]:    * "Diseoverio of the Large, Rich, and Bewtifull Empire of Guayana," p. 112.
    + Stentornis Caripensis, generally referred to the family of the goat-suckers, but differing widely from all the other members of the Caprimulgide, in having a strong bil, and in being a fruit-eater. It is also, unlike most frugivorous birds, nocturnal in its labits, spending the day in decp dark caverns like that of Guaeharo.

[^43]:    * .. Journal of an Expelition 1,400 miles up the Orinoco," by J. H. Robinson, late Surgeon in the Patriotio Army (1822), p. 301, \&ce.

[^44]:    - For the Botany and Zoology, see more particularly A. Frnst: "Fstudios solbe lia Hora y Fama de Venerulla" ( 1876 ).

[^45]:    * C. B. Brown: Proceedings of the Royal Gcographical Society, Vol. VI., p. 122, and "Canoo and Camp Lifo in British Guiana" (1876).

[^46]:    * This magnifieent lily, now not uneommon in our hothouses, was introduced into Europe by Sir Robert Schomburgk, from the River Berbico, in 1837. In conjunction with azure-coloured Pontedera, various bladderworts, a species of Polygonum, Pistia, and various grasses, eover the whole surface of the river, so as to impede navigation.
    † "A Description of British Guiana," p. 31. See also his "Reisen in B. G." (1840-1845) ; Dalton: "History of B. G." (1855) ; Appun: "Unter den Troppen" (1871) ; and for nutural history, tho works of Bancroft, Stedman, Robert and Richard Schomburgk, Charles Kingsley, and Barrington Brown.

[^47]:    * If the Brazilian and Venezuelan claims were admitted this area would be reduced by 50,000 square miles.

[^48]:    * Colonial Office List (1876); Statistical Tables relating to the Colonial and other Possessions. Part XV., 1871-5 (Parliamentary Blue Book, 1878).

[^49]:    * "Tableaux de la population et des colonies françaises pour l'année, 18ía."

[^50]:    "Consular Report, 1874, cited in Martin's "Statesman's Year-Book" (1878).

[^51]:    * Cross: Gcographical Magazine, 1877, pp. 133 and 183, where will bo found the best account I am acquainted with of tho method of gathering and preparing the indiarubber milk. Seo also Narkham: Geographical Magezine, 1876, p. 31, for an exhaustive account of tho arrangements for introducing tho trees into India.

[^52]:    * Indeed, some will have it that this wood gate the namo to Brazil, rather than Brazil to the .nod. This wood, originally obtained from a species of Peltophorum, not anative of America, was called Brazil wood on tannut of its resemblance to brasas, or coals of fire. Hence the land where the new variety came from cventually comes to be called the " land of the Brazil-wood."

[^53]:    * Scully: " Brazil: its Cities and Provinces," p. 8.

[^54]:    * Scully: " Brazil: its Cities and Provinces," p. 179.
    + "South Amcrican Sketches," p. 26.

[^55]:    - Jonrnal of the Royal Gcographical Socicty, Vol. XLVI. (1876), pp. 2C3-277, and wôrh already cited.

[^56]:    * Probably a gencral name for Echinolana scabra, var. ciliuta, Panicum campestrc, Sc.

[^57]:    View of the city of bahla, brazil.

[^58]:    - Wells : Journal of the Roynl Geographical Society, Vol. XLYI. (1876), pp. 308-328.

[^59]:    *Scully, " Drazil, its Provinces and Chief Cities," pp. 4-12.

[^60]:    *This was ascended by Prof. Karl Wiener. The south-enstern mount ealled Paris Penk he found to measurs 6,131 metres sbove the sea. One ascent was mado from Catana. (Berlin Post, April 3, 18i8.)

    + "Races of Mankind," Vol. II., p. 313.

[^61]:    * Church: Geographical Magazine, April, 1877; Chandler: Journal of the Royal Geographical Socicty, 1866.

[^62]:    * Herr von Thiclmann, in his ascent of Cotopaxi-over 19,000 fect-experienced, according to his own account, no suffering on the summit except "from too much appetite." This must bave been an exceptional case, as the facts about the Zoroche, to bo.presently related, prove.

[^63]:    - Muaters: Jourmal of the Royal Goographical Sociely, Vol. XLVII. \{1877), pp. 201-216.

[^64]:    - Musters : lib."cit., pp. 212-214.

[^65]:    * Markham: Jourual of the Royal Gcographical Society, Vol. XXXI. (1861). \&e.
    $\dagger$ Matthews: Procecdiugs of the Royal Geographical Society, Vol. XXII. (187i), p. 47.

[^66]:    * A. Bennett: Edinburgh Medical Journal, Oct., 1873, p. 33; Christison: British Medical Journal, 1876, p. 527; Markham: "Travels in Peru and India," p. 232; Tschudi: "Travels in Peru;" Gareilasso de la Vega: "Commentaries of the Incas," translated by C. R. Markham, \&c.

[^67]:    " M. G. and E. T. Mulhall: "Handbook of the River Plate Republies" (18:5).

[^68]:    * The Messtr. Mullaill, from the excellent opportunities they have of aseertaining the truth, have arrived at the decision given. It may however, be alded, by way of modification, that a rough census made in 1873 -but how I havo failed to learn-clains for the Repullic 221,070 inhabitants, of whom 80,019 were children, 28,746 males above fifteen $y$ ars of age, and 100,254 females over the same years. In 1876 , the population was estimited at 203,814 inhabitants. The strangers in that year were numbered at 6,000 . Of these, 1,500 were Braxilians, 2,500 Italians, 600 Portugnese, 400 Argentines, $2: 50$ Spaniards, 1 ह0 Austrians, 120 French, 90 Germans, 80 English, 80 Cruguayans, and 930 of other nationalities. These figures must be received with caution.

[^69]:    *The plant is commonly called yerba-maté. Tho maté, however, is the gourd out of which the infusion of yerba, or "herb," is sucked,

[^70]:    * Keith Johnston: Geographical Magazine (1875), p. 345.

[^71]:    
    $\dagger$ Johnston: "Recent Journeys in Paakuay," Gcographical Maguzine (18i5), pp. 343-345; also Washbun:
    "History of Puruguy" (1871); Quentin: "Le Paraguay" (1866) ; Thompson: "Tho Paraguayan War"
    (1869); Mansfich: "Iariumy, Bazil, aud the River Plate" (13e6) ; Du Graty: "Le Republique de langua,"
    "History of Puruma" (1871); Quentin; "Le Paraguay" (1866); Thompson: "The Paraguayan War"
    (1869); Mansfich: "Puriguy, Bazil, aud the River Phate" (13e6) ; Du Graty: "Le Repulique de Pangua"

[^72]:    (1865) ; Demersay: "Histoiro Physique, Economique, et Politique du Paraguay, \&c." (1865); Mastermun: "Scven Eventful Years in Paraguay" (1869); Azara: "Description of Paraguay" (English Trans., 1836); Dobrizhoffer: "Account of the Abiponce" (1822).
    "Mulhall: "Handbook of the River Plate Republics," pp. 12, 13. Behm and Wagner: "Bevëlkerung der Eirde" (1878).

[^73]:    * Maria: "Compendio de la Historia de la Republiea Orimatal del Trugnay" (186.4); Vaillant: "La Republiva Oriental del Uruguny" (1873) ; Reyes: "Descripeion geografiea del territorio de la Repulica Oriental del Uruguay" (1859); Murray: "Travels in Urugnay" (1871) ; Pallicre's: "River Plate Album" (1866) ; Consular Reports, 1875, 1876, 1877, the work of Horner, Grieben, and Sturtz, \&e.

[^74]:    - In this part of the world, 1 vara is equal to 34 English inches, 1 cuadra to 150 varas, 40 cuadras to 1 league, and 1 square leaguc to 6,500 English acres. For all ordinary purposes 12 cuadras may be taken as equal to an English mile. An arrobe is 25 lbs .; a quintal, 4 arrobes.

[^75]:    * The litemeture of the Argentine States is rather extensive. In the Appendix to Mulhall's "Handbook" will he foumd a list of the chicf works. In addition to this admirable treatise, I have consulted, in tho preparation of this sketch, correspondents possessing much private informution, and the usual official and other statistical documents; us well as Nipp's "Argentine R'public" (Lhurlish edition, Buenos Ayres, 1876); Burmeister's "Physikalische Beschrcibung der Argentinischen Republik" (1875̄) ; Beek-Bernard's "La République Argentine" (1872) ; Hadfield's "Brazil and the River Plate" (1877); Rickard's "Tho Minerul und other Resources of the Argentine Republic;" and other papers und works quoted.

[^76]:    * "Physikalische Beschrcibung der Argentinisehen Republik." Vol. I. p. 290.
    $\dagger$ Mulhall: "The English in South America" (1878), p. 335.

[^77]:    * Mexico, we presume; or can it be the United Statea 8

[^78]:    * Napp: "The Argentine Republic," pp, 29-32.

[^79]:    - Hinchliff, lib. cit., p. 52.

[^80]:    " "Gcological Observations in South Americn" (1846); "A Naturalist's Voyago Round tho World" (1839).

    + Markham: "Contrilutions towurds a Grammar and Dictionary of Quichua, the language of the Yncas of Peru" (1804).
    $\ddagger$ Another specios-G. saccharoides - which is found in Brazil, yields a considerable quantity of sugar.

[^81]:    - Selvas is a term rarely applied to forests in the River Plato country. The word monte also means a mountain.

[^82]:    * E. W. White: "A Naturalist's Visit to tho Sierras of Cordova," Field, September 14th, 1878.
    t "Letters on Paraguay," Vol. I., p. 236 (quoted by llinchliff, ilb. cil., pp. 15j), 156).

[^83]:    * Mulhall : lib. cit., pp. 101-10.) ; Lorentz and Wezenbergh : in Napp, lib cit., pp. 8.j-17i, de.
    .t Alleyne Nichotson: "Ancient Life IIistory of the Earth" (1877), rp. 3:50-352.

[^84]:    * Drinking shops sattered about the lonely parts of the country.

[^85]:    * Hinehliff: "South American Sketches," pp. 152, 170, \&e.
    '. "Chaco" is the Guarani Indian word for "hunting ground."

[^86]:    * Musters: "At ILome with the Patagonians" (1871) ; Queseda: "Patagonia y las Tierras Anstrales" (1876); Moreno: Geographical Magazine, 1878, p. 209, and Buenus Ayres Standard, May 30, 1878, \&e.

[^87]:    a patagomin foxelina

[^88]:    - The chief are the Great Swan, Saunders, Keppel, Peible, Eagle, and Jason.

[^89]:    *Cunningham: "The Natural History of the Strait of Magellan" (1871), pp. 150-161.
    $\dagger$ Tho notes which follow I glean from the latest report of Governor Callaghan, C.M.G. to the Culoni., Office, which reaches me as theso pages go to press. ("Papers relating to Her Majesty's Culonial l'ossessions: reports for 1876 und 18i7, in continuation of $1877^{\prime \prime}$ (1878), p. 222).

[^90]:    * Report of Mr. J. Wright Collins, Government Schoolmaster at Stanley (1878).

[^91]:    - Formerly Nuturulist of II.M.S. Nassau, now Professor of Natural History in Queen's College, Belfast.

[^92]:    - Theristicus melumopis.
    † "Natural History of the Strait of Magellan," pp. 78-91, \&e.

[^93]:    " Races of Mankind,' Vol. I., p. 310.

[^94]:    - The data are given on the authority of the Bishop of the Fulklands and Governor Callaghan. See alsa tho Voyages and Sailing Directions of Fitzroy, Woddell, MaeDougall, and Snow.

[^95]:    * Spry : lib. cit., p. 103.

[^96]:    - Mficropterus ninercus.

[^97]:    * The native country of tho potato has been the subject of much discussion. It has been found wild on the Peruvian coast, as well as in the southern parts of Chili, and the mountainous region of the Argentino Republic. The Spaniards are believed to have bronght it to Europe from Quito, but it was not for more than half a ecntary after it was known in Italy and Belgium that Sir Walter Raleigh's, colonists brought it to Britain, and phanted it on Sir Walter's estate near Cork.
    + "Reports of Embassy and Legation," Part III. (1876). In what follows I have taken advantage of his data, and also those with which Mr. Markham has annotated it (Gcographical Magazine, 1877, \%. 00), from his own observations and the official Amuario Hidrografico, Vol, II., of Capt. Vidal Gormaz.

[^98]:    * Black and Walters.

[^99]:    * Vicuña Mackenna: "Historia de Vilparaiso," eited by Markham: Gcographical Magazine, 1877, p. 01.

[^100]:    * A list of all the Europeans who served in the War of Independence will be found in the Appendix to Markham's "Travels in Peru and India" (1862), and in Mulhall's "English in South America" (18i8).

[^101]:    *Se the works of Claudio Gaye, Molina, Alonso de Ovalle (the last two in English versioni; Mackenra, Markham, and other writers.

[^102]:    * Ostrea Chilensis, only found on the west coast of South America, at Chiloe.
    $\dagger$ Mytilus Chilemsis.

[^103]:    *"Statesman's Year-Book" (1878), p. 523; the figures, however, in the Almanack de Gotha for 1878, p. 598, show a less debt, and a greater revenue than those quoted.

[^104]:    - Sometimes even as high as 300,000 .
    $\dagger$ "Orelio Antoine Iére Roi d'Araucanie et de Patagonie, par lui meme"(Pıris, 1863) ; Smith: "The Araucanians" (New York, 1855).

[^105]:    * Seo the works of Maria Gruham (1824); Schandtmeyer (1824); Culdchengh (1820); Mathison, Stephenson Scarlett, Sutcliffe, Miers, Basil Hall (1825) ; the "Memoirs" of General Miller, and Lord Dundonald, Pöppig (1835); Perez-Rosales (18i5) ; Bollacrt (1860) ; Astn-Buruagn (1868); Fonck (1870) ; Menador (1873) ; Innes (1875); "Reports of Emhassy and La gation;" "Consular Reports;" "Chili," in Encyclopedia Dritannica (9th Ed.); "Quinto Censo jenerâl de la poblacion do Chilo levantado de 10th abril de 1875, i compilado por la Officina central de Estadistica en Saaliago " (Valparaiso, 1876), \&c. \&ic.

[^106]:    *Paz-Soldan ("Diccionario geogratico Estadistico del Pera," 187i) gives the population in 1790 as 1,232,122.

[^107]:    - Tho arrangement hetween Pern and bolivia was that no Castom Honses should be crected on the frontiers of tho two countrics, on condition that l'eru paid to Bolivia 400,000 soles per year, or about $£ 75,000$. Sinen writing tho account at p. 190, this treaty has been abrogated, and though it is believed it will soon bo renewed, Bolivia has in tho meantime established Custon Houses on her frontiers.
    $\dagger$ "Reisen durch Sùdamerika" (1860-68).
    $\ddagger$ " Races of Mankind," Vol. I., p. 316.
    § Markham: "Cuzeo and Lima" (18.36), p. 304; and "Travels in Peru and India" (1862), p. 97,
    || General Milller's "Memoirs," Vol. II., p. 238.

[^108]:    * Markham: "Preru and India," p. 99.
    † Paz Soldan: "Geografia del leru" (1561), ete.
    $\ddagger$ Squier: "Pern: Incidents of Travel aud Exploration in the Land of the Incas" (1874), pp. 356-3i57.
    § Suith; " Perru as it is" (1839), Vol. II., p1. 1-28.

[^109]:    * A corruption of Iluanu (nunure).

[^110]:    *"Rogal Commentaries of the Ineas"; Quoted by Mr. Markham, " Peru and India," p. 301.

[^111]:    *Sco also, Dufficld: "Peru in the Guano Ago" (1877); Cherot: "Le Perou: Productions, Guano, Commerce, Finances, \&e." (1876).
    † Markham: "Cuzeo and Lima," p. 39; "Informes sobre la existencia de IIuano en las islas de Chincha" (Lima, 1854); Paz.Soldan: "Diccionario geografico Estadistico del Peru" (1877).

[^112]:    " Bollaert: "Antiquities, Ethnology, de., of South America" (1860).

[^113]:    * Rivero : " Antiquadades Peruanas," Cap. I., p. 17.

[^114]:    * See the numerous works of Mr. Markham, as well as those of Howard and Weddell, and the reports of Dr. Spruee and others. Moro recent researches in Peru, \&e., are thoso of Dr. A. Bastean [" Dio Cultur'inder des alten Amerika" (1878)], and on the border lands of tho republic those of Scinor Zeballos ["La Conquista do Quince Mil Leguas" (1878).]

